HUNTERIAN SOCIETY

TRANSACTIONS.

SESSION 1893-94.

ABSTRACT OF THE

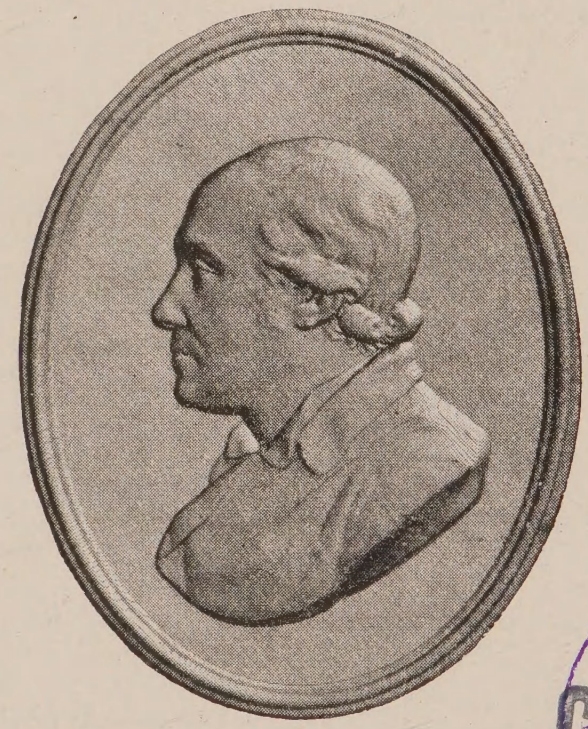
TRANSACTIONS

OF THE

HUNTERIAN SOCIETY,

1893-94.

SEVENTY-FIFTH SESSION.



Ratio Societatis Vinculum.

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1894.

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1874 Robert Barnes, M.D.
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1894 Charters J. Symonds, M.S., M.D.

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1856 **ALLINGHAM, WILLIAM, late Senior Surgeon to St. Mark's Hospital, *25, Grosvenor Street, W.*

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1889 BARLOW, THOS. C. ... ... *88, Dalston Lane, N.E.*

1854 **BARNES, ROBERT, M.D., late President, Consulting Obstetric Physician to St. George's Hospital, *6, Queen Anne Street, W., and Lingwood, Liss, Hants.*

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1892 BASS, FREDERICK ... ... *17, Charterhouse Square, E.C.*

1893 BATTEN, RAYNER D., M.D. ... *14, Finsbury Circus, E.C.*

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1871 BUNCOMBE, CHAS. H., Medical Superintendent, City of London Infirmary ... ... *Bow Road, E.*

1889 BURGER, ALEXANDER, M.D., M.Ch., Surgeon to the German Hospital, *10, Finsbury Square, E.C.*

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1892 CHEATLE, ARTHUR H. ... *The Evelina Hospital for Sick Children, Southwark, S.E.*

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1858 **CLAPTON, EDWARD, M.D., late Physician to St. Thomas's Hospital, *22, St. Thomas's Street, S.E., and Towercroft, Lee, S.E.*

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When Admitted.

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1879 DAVIES, JOHN... ... ... *91, New North Road, N.*

1893 DAWSON, BERTRAND E., M.D., B.Sc., Assistant Physician to the Royal Hospital for Diseases of the Chest, and Demonstrator of Physiology at the London Hospital ... *46, Finsbury Pavement, E.C.*

1892 DINGLE, WILLIAM A.... ... *46, Finsbury Square, E.C.*

1883 DUKES, WM. P., M.D. ... *75, Brick Lane, E.*

1889 DUNN, LOUIS A., M.B., M.S., Senior Demonstrator of Anatomy at Guy's Hospital ... ... *The College, Guy's Hospital, S.E.*

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1875 GALABIN, ALFRED L., M.A., M.D., Obstetric Physician to, and Lecturer on Midwifery at, Guy's Hospital, *49, Wimpole Street, W.*

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1893 GROGONO, WALTER A. ... *Berwick House, Broadway, and 216, High Street, Stratford, E.*

1893 HADLEY, WILFRED J., M.B., Assisitant Physician to the London Hospital ... ... *11, Wimpole Street, W.*

1894 HALLEN, A. E. H. CORNELIUS, M.B., C.M., *264, Burdett Road, E.*

1894 HALLIDIE, ANDREW, M.A., M.B., *London Hospital, E.*

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1875 *HERMAN, GEORGE ERNEST, M.B., Obstetric Physician to, and Lecturer on Midwifery at, the London Hospital, *20, Harley Street, W.*

1888 HEWER, J. LANGTON, M.D., B.S., *33, Highbury New Park, N.*

1862 **HICKS, G. BORLASE ... ... *149, Amhurst Road, Hackney, N.E.*

1860 **HICKS, JOHN BRAXTON, M.D., F.R.S., late President, Consulting Obstetric Physician to Guy's Hospital, and to St. Mary's Hospital ... ... *34, George Street, Hanover Square, W.*

1883 HORROCKS, PETER, M.D., Vice-President, Assistant Obstetric Physician to Guy's Hospital ... *26, St. Thomas's Street, S.E.*

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1893 KINGSFORD, EDWARD CLAUDE, *Carntyne, Brondesbury, N.W.*

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1860 **LITCHENBERG, GEO., M.D., Surgeon to the German Hospital, *47, Finsbury Square, E.C.*

1889 LINGARD, ALFRED, M.B., M.S., *Poona, India.*

1863 *LITTLE, LOUIS S., late Surgeon to the London Hospital, *Shanghai, China.*

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1894 M'Donnell, Wm. Campbell, *Park House, Albion Road, Stoke Newington, N.*

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1893 Osburne, Cecil A. P. ... *The Oaks, Hythe, Kent.*

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1864 **Pettifer, Edmund H. ... *50, Southgate Road, N.*

1888 Pitt, G. Newton, M.D. *(C)*, Assistant Physician to, and Lecturer on Pathology at, Guy's Hospital, *24, St. Thomas's Street, S.E.*

1881 Poland, John, Vice-President, Visiting Surgeon to the Miller Hospital, Greenwich... ... ... *4, St. Thomas's Street, S.E.*

1875 Port, Heinrich, M.D., Physician to the German Hospital, *48, Finsbury Square, E.C.*

1882 Potter, George W., M.D., C.M. *(C), 8, King Street, Cheapside, E.C., and Keldholme, Tunbridge Wells.*

1870 **Pye-Smith, P. H., B.A., M.D., F.R.S., late President, Senior Physician to, and Lecturer on Medicine at, Guy's Hospital, *48, Brook Street, W.*

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When Admitted.

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1890 RAW, WM. E. ST. M. ... *Oakbank, Crystal Palace Park Road, Sydenham, S.E.*

1892 RAWES, WILLIAM, M.B. ... *St. Luke's Hospital, E.C.*

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1855 **ROPER, GEORGE, M.D., Consulting Physician to the Royal Maternity Charity ... ... *Oulton Lodge, Aylsham, Norfolk.*

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1892 SEQUEIRA, GEORGE W. ... *34, Jewry Street, Aldgate, E.C.*

1890 SEQUEIRA, HENRY J. ... ... *34, Jewry Street, E.C.*

1842 **SEWELL, CHARLES BRODIE, M.D., *21, Cavendish Square, W., and 13, Fenchurch Street, E.C.*

1891 SHADWELL, ST. CLAIR B. ... *Lymhurst, Orford Road, Walthamstow, Essex.*

1888 SHAW, LAURISTON E., M.D., Assistant Physician to Guy's Hospital, *10, St. Thomas's Street, S.E.*

1854 **SHILLITOE, BUXTON, Surgeon to the Lock Hospital, *2, Frederick Place, Old Jewry, E.C.*

1869 **SMEE, ALFRED H. ... ... *The Grange, Hackbridge, Surrey.*

1887 SMITH, FREDERICK JOHN, B.A., M.D. (*C*), Assistant Physician to the London Hospital ... *4, Christopher Street, Finsbury Square, E.C.*

1875 STEVENS, GEORGE J. B. ... *Wadhurst House, Stoke Newington Green, N.*

1892 STOCKER, CHARLES JOSEPH ... *Weston House, Richmond Gardens, Forest Gate, E.*

1893 STONHAM, HENRY ARCHIBALD, *30, Albert Square, Ratcliff, E.*

1884 STOWERS, JAMES HERBERT, M.D., Physician for Diseases of the Skin at the North-west London Hospital, *41, Finsbury Square, E.C.*

1880 SYMONDS, CHARTERS J., M.S., M.D., President, Assistant Surgeon to, and in charge of Throat Department, and Teacher of Practical Surgery at, Guy's Hospital, *26, Weymouth St., Portland Place, W.*

1878 TALBOT, RUSSELL M. ... ... *Clarendon House, 155, Bow Road, E.*

1889 TARGETT, JAS. H., M.B., M.S., Assistant Surgeon to the Evelina Hospital, and Demonstrator of Anatomy at Guy's Hospital, *6, St. Thomas's Street, S.E.*

When Admitted.		
1879	TATHAM, ROBERT G. (*C*)	... *69, East India Road, E.*
1869	**TAY, WAREN, Senior Surgeon to the London Hospital,	*4, Finsbury Square, E.C.*
1880	THORP, HENRY J., Vice-President,	*11, Southwark Bridge Road, S.E.*
1890	TUBBY, ALFRED H., M.B., M.S. (*C*), Demonstrator of Physiology at Guy's Hospital	*39, Finsbury Circus, E.C.*
1877	*TURNER, F. CHARLEWOOD, M.A., M.D., Treasurer, Physician to the London Hospital... ...	*15, Finsbury Square, E.C.*
1890	WALKER, CHAS. R., M.D. ...	*Gainsborough House, Leytonstone, E.*
1887	WALLACE, FREDERICK ...	*Foulden Lodge, Upper Clapton, N.E.*
1857	*WALLACE, RICHARD U., M.B.,	*Cravenhurst, Craven Park, Stamford Hill, N.*
1887	WARNER, PERCY	*Woodford Green, Woodford, Essex.*
1876	WELCH, CHAS.	*377, Hackney Road, E.*
1876	WHITE, JOHN B., M.D., M.Ch.,	*14, Portland Place, Lower Clapton, N.E.*
1893	WILLIAMS, GEORGE ROWLAND,	*27, Queen Street, Cheapside, E.C.*
1888	WINGRAVE, THOS.	*43, Finsbury Circus, E.C.*
1887	WOODS, JOHN F. (*C*) ...	*Hoxton House Asylum, N.*
1882	WORLEY, WILLIAM C. ...	*103, Green Lanes, N.*
1889	WRIGHT, HOLLAND H. ...	*2, Ospringe Road, St. John's College Park, N.W.*
1880	YARROW, GEO. E., M.D. ...	*26, Duncan Terrace, Islington, N.*

[*It is requested that any change of Title, Appointments or Residence may be communicated to one of the Secretaries before the Annual General Meeting, in order that the list may be made as correct as possible.*

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ENGLISH, EDGAR	*Mexborough, Rotherham, Yorks.*
HIRSCH, CHAS. T.W.	*Fiji.*
PIERCE, BEDFORD, M.D.	*The Retreat, York.*
ROBERTS, BRANSBY, M.D.	*Badlesmere House, Eastbourne.*
TREVES, WILLIAM KNIGHT	*31, Dalby Square, Margate.*

N.B.—Written Communications on Medical Subjects and Donations of Books will be thankfully received.

THE SEVENTY-FIFTH ANNUAL REPORT

OF THE

COUNCIL OF THE HUNTERIAN SOCIETY.

THE Hunterian Society has continued in active work during the past Session. The attendance of the Meetings has been well maintained, and, under the guidance of the President, who kindly continued a second year in office, and has devoted much time and energy to the interests of the Society, its deliberations have been full of instruction to the Fellows.

The HUNTERIAN SOCIETY LECTURES of the past year have been delivered by Mr. Walter Rivington and Dr. Armand Ruffer respectively : the former had for its subject certain Surgical Operations, and the latter took the form of a demonstration, with the aid of the lantern, of recent researches on the pathogenic organisms of Cancer and certain other diseases. Both lectures were found of much interest to the Fellows and visitors who attended.

Amongst the various papers read before the Society may be mentioned the following : On the Practical Inferences to be derived from the Bacillary doctrine of Tuberculosis, by Dr. Arnold Chaplin ; On the Therapeutic Uses of Thyroid Extract, by Dr. Arthur Davies ; On Sporadic Cretinism, by Dr. Fletcher Beach ; and on the Inhalation of Oxygen, as a means of medical treatment, by Dr. G. Newton Pitt.

The Clinical and Pathological Evenings have afforded opportunity for bringing together cases and morbid specimens of much interest.

The Council, mindful that the past year formed the hundredth anniversary of the death of the great medical leader whose name the Society bears, determined to celebrate the event in a fitting manner. A Conversazione was held on October 18th in the rooms of the London Institution,

by the kind permission of the Managers. About 400 guests attended, and many objects of interest connected with John and William Hunter, their relatives and pupils, were exhibited, as well as many other things of medical or scientific interest. An extensive musical programme was successfully carried out under the care of one of our Vice-Presidents, Dr. Dundas Grant, whilst the general arrangements of the conversazione were undertaken by a Committee of the Council. The cost, amounting to £128, was defrayed by voluntary subscriptions from Fellows, who consented to act as Stewards for the occasion, and a small surplus was realized, the disposal of which has not yet been decided on. The Society is to be congratulated on the success of the John Hunter Centenary Conversazione.

Sixteen new Fellows have been admitted during the past year, whilst twelve have resigned, or have ceased to be Fellows, and three have been removed by death. The total number of Fellows on the roll now stands at 175, of whom 160 are Ordinary Fellows, 7 Honorary, and 8 Corresponding Fellows.

The death of Sir Andrew Clark, Bart., on the 6th of November, 1893, at the age of 68 years, is still so recent, and his loss has been so national in its character, that it is the less needful to add here any lengthened tribute to his memory. Sir Andrew Clark joined the Society in 1885, and delivered the Annual Oration in the next year, drawing for his audience a very graphic picture of the life of the great man in whose honour the Oration is given. Sir Andrew's numerous engagements prevented him from taking much other active part in the Society: he was, however, Vice-President at the time of his death, and his aid was never refused when sought for to help forward the Society's work.

Mr. Robert Humphrey Cooke was the last surviving son of Dr. William Cooke, who is regarded as the Founder of the Hunterian Society. He joined the Society in 1848, and served on the Council in 1856. Mr. Cooke led a quiet but useful life as a practitioner in Stoke Newington,

respected and esteemed by all who knew him, and the trusted medical confidant of many. He had retired from the practice of his profession for a good many years when he died, on the 4th of September, 1893, aged 78 years.

Mr. William C. Toulmin was also a suburban practitioner during most of his life, succeeding to the large and important practice carried on by his late father and uncle at Clapton. He subsequently retired from medical work, but continued occasionally to attend our Meetings. Mr. Toulmin joined the Society in 1869, served eight years on the Council between 1875 and 1883, and was Vice-President in 1884 and 1885. He died on 15th July last.

Particulars of the Society's income and expenditure will be found in the accompanying balance sheet.

REPORT OF THE LIBRARY COMMITTEE OF THE HUNTERIAN SOCIETY.

The Library Committee of the Hunterian Society met at the London Institution on January 23rd, 1894, and inspected and examined the books and the book cases, and were of the opinion that although there was a certain amount of dampness amongst the former, they and the cases were in a satisfactory condition. The number of books used shows some increase, but the Committee are of the opinion that a little slip be printed in the Annual Report, calling the attention of the Fellows to the existing facilities for using the books.

The Committee suggests that the duplicates of the Medico Chirurgical Society's Transactions, 43 vols., be presented to the University of Toronto, or failing this, to offer them to the University of Wales.

Fred. J. Smith.
Arnold Chaplin.
F. R. Humphreys.
Arthur T. Davies, *Hon. Librarian.*

BOOKS PRESENTED TO THE LIBRARY OF THE HUNTERIAN SOCIETY, 1893-94.

Hutchinson. Jon$^{n}_{,,}$ Archives, Vols. 1-20.
Bowles, Robert, M.D., Stertor and Apoplexy.
22nd Annual Report of The Local Government Board.
21st ,, ,, ,, ,, 1891-92, with Supplement containing the report of Medical Officer for 1891-92.
Report on the Influenza Epidemic, Local Government Board, 1889-90.
Further Reports and Papers on Epidemic Influenza, 1889-92.
Morris, Malcolm, Diseases of Skin.
Herman, G. E., Difficult Labour.
Bastian, Charlton—(1) Hysterical and Functional Paralyses.
(2) Paralyses, Cerebral, bulbar, and spinal.
Fox, Fortescue, Strathpeffer Spa.
Macready, A Treatise on Ruptures.
Transactions of Clinical Society, 1893.
Transactions of Pathological Society, 1893.
Transactions of the Obstetrical Society, Vols. xiv.-xxxiv.
Presented by Dr. Yarrow.
St. Bartholomew's Hospital Reports, 1893.
St. Thomas's Hospital Reports, 1893.

PURCHASED BY THE COUNCIL :—

New Sydenham Society's Publications :
Paludism, Laveran.
The Collected Writings of Sir W. Gull.
Clinical Lectures on Medicine and Surgery, various Authors.
Lexicon of Medical Terms, Parts XX. and XXI.
Ashby and Wyatt, Diseases of Children.
Byrom Bramwell, Diseases of the Heart.

REGULATIONS FOR TRANSMISSION OF BOOKS TO FELLOWS FROM THE LIBRARY.

1. A Fellow wishing a Library Book sent to him, may order the book by letter to the Assistant Librarian, enclosing six Stamps in pre-payment of carriage and packing.
2. The Library attendant will pack and send Books to Fellows, enclosing the usual receipt form in each parcel with the books, and shall receive twopence for each packet so sent.
3. To prevent loss, in case of a Fellow forgetting to send back the receipt, the letter requesting the book to be sent shall be kept by the Assistant Librarian, and the Library Attendant shall keep a list of the books packed by him, and of Fellows to whom they have been sent.

HUNTERIAN SOCIETY.

BALANCE SHEET FOR 1893.

Receipts.

	£	s.	d.
By Balance from 1892 account	47	3	11
,, Subscriptions for 1893 :—			
Current 78 ... ... £81 18 0			
Entrance 13 ... ... 13 13 0			
Arrears 4 4 0			
In advance for 1894... 4 4 0			
	103	19	0
,, Dividends on £316 0s. 7d. Goschens...	8	8	8
	£159	11	7

Payments.

	£	s.	d.
To Purchase £16 0s. 7d. Goschens by Composition Life Subscriptions (1892)	15	15	0
,, Lancet and Bookbinding	5	3	5
,, Subscription to New Sydenham Society	1	1	0
,, Printing Annual Report, etc.	51	0	7
,, Guests at Annual Dinner	2	3	6
,, Clerical Aid to Hon. Secretaries and Hon. Treasurer, Postage, etc. ...	7	10	5
,, Sub-Librarian	15	15	0
,, Mr. Goodman	6	2	0
,, Mr. Nelson	2	12	6
,, Refreshments	8	13	0
,, Insurance	1	1	0
,, Collector's Commission	4	0	0
	£120	17	5
To Balance	38	14	2
	£159	11	7

Audited and found correct,

R. Clement Lucas.
Fred. J. Smith.
F. R. Humphreys.

THE ANNUAL ORATION, 1894.

REFLECTIONS ON THE LIVES OF

JOHN HUNTER AND ANDREW CLARK.

BY DUNDAS GRANT, M.D., F.R.C.S.

Mr. President and Gentlemen,

In presuming to address you on the subject of the immortal Hunter, I feel that some excuse, I will not say apology, on my part is required. The topic has been so frequently and so well handled by orators of the highest standard that it must be admitted there is little left unsaid. When, however, I recall that the centenary of our hero's death was considered by us a date of such importance that we held it necessary to commemorate it by the most extensive social function the Society has hitherto organised, I feel that I cannot allow this, the oration nearest in time to that event, to pass without making its main theme the man whose memory we venerate, and the works on which the claim to that veneration is so justly founded. I feel, at the same time, that there are other subjects which I am better qualified to treat in an instructive manner, but I have been influenced by the circumstances I have already mentioned, and I offer you opinions, founded not only on a study of many of Hunter's writings, but on the study of the many admirable Hunterian Orations in which the ablest exponents of surgery have critically appraised his work.

The events of the life of John Hunter are probably not unfamiliar to all or most of those present, but I shall briefly recall to your minds some of the chief points connected with it, derived mainly from Ottley's "Life of John Hunter" contained in Palmer's edition of Hunter's Works, and Everard Home's Life of Hunter prefixed to his edition of Hunter's

Works on "The Blood, Inflammation, and Gun-shot Wounds."

John Hunter was born of good middle-class parents, his father being descended from an old Ayrshire family, at Long Calderwood, near East Kilbryde, in Lanarkshire, on the 13th or 14th of February, 1728. Sir Everard Home gives it as the 14th, but in the parish register according to good authority it is entered as the 13th. Probably Sir Everard was guided by the recollection of the domestic festivities connected with the celebration of the successive anniversaries of the event, and the Royal College of Surgeons has accepted his dictum, for on the 14th of February in every other year the Hunterian Oration is delivered in the Theatre of that College.

That the parents seem to have relaxed in the exercise of the usual Scottish educational discipline by the time it came to the turn of John, their tenth child, is not surprising, and we find it recorded that he preferred to roam fancy free rather than to be tied to the school desk. On the death of his father, he was left at the age of ten to the care of an indulgent mother, who perhaps not unwisely allowed him to sacrifice his studies for the sake of fortifying, in the midst of country pursuits and sports, a constitution which, judging from the delicacy of the rest of the family, cannot have been of the most robust. That the scantiness of his educational advantages resulted in a singular want of elegance and facility of expression cannot but be painfully obvious to those who have read his works.

The familiarity with the characters and habits of the various animals, birds, insects, and others in their natural state, acquired during his country ramblings, no doubt laid the foundation of his researches in natural history.

Hunter prided himself upon his manual dexterity, and with what good reason we have ample proof. His first move from home was for the purpose of employing this faculty for the sake of re-establishing the business of his sister's husband, a cabinet maker of intemperate habits, who had allowed his affairs to sink beyond recovery.

John Hunter then came to London at the age of twenty to his brother William, already a physician of eminence, and a teacher of anatomy. The doctor was delighted with our hero's dexterity and aptitude, and speedily made him of use in the dissecting room of the School for Naval Surgeons in Windmill Street, near Leicester Square. Full of life and ambition to be first in every pursuit, Jack Hunter

was not merely *facile princeps* in practical anatomy, but leader in the revels of the rowdy companions, who were most congenial to his somewhat unrefined taste. He acquired his first knowledge of surgery from Cheselden at Chelsea Hospital, but his earliest connection with a medical school was his entry at St. Bartholomew's as the articled pupil of the then rising Percival Pott, who is credited with being one of the first to study the remedial power of nature, and to set his face against the methods then in vogue for thwarting her beneficence. Hunter was then twenty-three years of age, and two years later his brother induced him to join St. Mary's College, Oxford, as a gentleman commoner, with a view no doubt to the desirability of softening his manners by the faithful study of the liberal arts. As a gentleman commoner he could enter without a preliminary examination, an ordeal which, in the neglected state of his literary education, he could not possibly have gone through. He further seems to have advised him to devote himself to midwifery, surely the very last branch of medicine for which this fiery uncouth being was adapted.

Surgery was his bent and he determined to have a place on the staff of one of the hospitals, so finding greater facilities at St. George's than at St. Bartholomew's he entered himself there as a surgeon's pupil, attending during the summer only, and working and studying in his brother's dissecting room during the winter. Two years later he became house-surgeon, and then devoted himself to experimental research with such vigour that his health gave way, and for the sake of change he sought and obtained the appointment of staff-surgeon in the army. He was soon actively engaged in the operations carried on in France and in the Peninsula, and, while throwing all the strength of his character into his pursuits, he recovered his health and increased his experience of gunshot wounds and of the various diseases incidental to military campaigns. He does not seem to have acquired the *bonhommie* necessary for ingratiating himself with his fellows, but he found time to carry out some important experiments on various reptiles and amphibia which formed a part of his later studies of digestion. At the end of two years the war came to a termination, and Hunter, leaving the army on half-pay, returned to London to make a fresh start in practice. His place in the dissecting room was filled by the able Hewson, but we find him lecturing on surgery and anatomy and continuing his re-

searches in natural history with all his former zest. To facilitate his studies of the lower animals he took a house and grounds, up till lately the asylum known as Earl's Court House, in the then rural district of Earl's Court. Here he had dens constructed for various wild beasts, and on his lawn might be seen disporting themselves, the most incongruous collection of creatures, *vide* a sympathetic description by Frank Buckland in his "Toy-book of a Fisherman and Zoologist," 1891. He was in 1767 elected a Fellow of the Royal Society, that exclusive body being so impressed with the value of his work as actually to relax in his favour the rule that no one should be admitted who had not already read before them a paper on some original investigation. Next year he was the successful candidate for a surgeoncy at St. George's Hospital, and in 1770 he settled down in Jermyn Street, in the house previously occupied by his brother William.

He was now forty-two years of age, struggling hard to make a position in the face of many social and pecuniary difficulties, the latter all the greater from the lavish way in which he expended his money in procuring materials for his work, and for the foundation of that magnificent musuem which we all hold in such admiration, and which is in the highest sense the grandest monument a single man ever erected to himself. It may indeed be truly, if tritely, said,

Si monumentum quæris, circumspice.

In his generation the surgical field was occupied by a splendid group of able workers, and with Pott, Cæsar Hawkins, Sharp, Bromfield, and Warner, still honoured and active, it is evident that there was little room for a new comer. He was, however, the maker of the next generation of surgeons, for we may rank among his pupils, Cline, Lynn, Sir Everard Home, Abernethy, Sir Anthony Carlisle, Macartney, Sir James Earle, and Sir Astley Cooper. His marriage with Miss Home, a lady whose dowry seems to have consisted in charms of person and mind rather than in a balance at the bank, and whose tastes were of an expensive rather than an economical nature, took place shortly before this, after a long engagement. His financial anxieties were therefore all the greater, and his struggle all the more arduous. Though his researches were to him a labour of love, his lecturing seems to have been much a matter of business. At the same time, he considered it the best mode of formulating his ideas, a method, as he termed it, of

"taking stock" of his knowledge, but he was uneasy in it, and so nervous, that frequently he had to dose himself with laudanum before commencing.

It is stated that till 1774, when he was forty-six years of age, his annual income never reached a thousand pounds, in spite of his great renown. In that year the various circumstances of his life brought on an alarming illness, apparently of a gouty nature, and characterised by gastric spasm with apparent cessation of the heart's action, which was perhaps the first warning of the presence of that cardiac disease which ultimately caused his death.

In 1774 he began his course of Lectures on the Principles of Surgery. Next year he conceived the idea of establishing a School of Natural History, with the assistance of Jenner, but abandoned it as impracticable in view of the unlikelihood of attracting a sufficient number of pupils to justify the enormous labour and expense involved. He received in 1776 the appointment of Surgeon-Extraordinary to the King.

Again in the following year his health broke down, the culminating cause being the call for a large sum of money for which he had become security on behalf of a friend. The most distressing feature was a constant vertigo with singular morbid acuteness of the senses unattended by fever. No remedies seemed to be of any avail, but in about ten days the symptoms began spontaneously to disappear. He was advised to resign business for a time and betake himself to Bath. Here he was visited by his friend Jenner, who was shocked at the change in his appearance, and communicated to Dr. Heberden his idea that the disease was a form of angina pectoris. In view of what he had observed at post-mortem examinations he believed that it was due to organic disease of the heart.

Hunter returned to London before his health was restored and recommenced his ordinary pursuits with his former diligence, including the communication of papers to the Royal Society, and the collation of facts, observations, and specimens. For these he laid his friends right and left under contribution.

In 1783 he moved from Jermyn Street to Leicester Square, on the east side of which at No. 28—now occupied by Messrs. Hawkes as a factory for musical instruments—he took a building with ground extending back to Castle Street, now in Charing Cross Road, and including a smaller house in that thoroughfare. He occupied with his family the house

in Leicester Square, and on the unoccupied ground constructed a large museum and lecture room at an expense of not less than three thousand pounds, although his lease was only for twenty-four years. In the same year he took part in the foundation of the "Society for the Improvement of Medical and Chirurgical Knowledge," which continued in existence for about twenty years. "At this period Hunter may be considered at the height of his chirurgical career," says Sir Everard Home,* "his mind and body were both in their full vigour; his hands were capable of performing whatever was suggested by his mind, and his judgment was matured by former experience."

The year 1785 was marked by the completion of the museum building, the transference to it of the marvellous collection, the frequent recurrence of his spasmodic attacks, especially on any mental disturbance, another visit to Bath, and in the month of December the performance of his now famous operation for the cure of popliteal aneurism.

Next year he was appointed Deputy Surgeon-General to the Army, he published his works "On the Venereal Disease" and "On the Animal Œconomy," received the Copley medal of the Royal Society, and opened his museum.

In 1788 death made another opening for him, and he stepped into the leadership of the surgical world of London, on the decease of his former teacher, the renowned and respected Percival Pott.

Hunter's health now became very precarious, the præcordial spasms were more frequent and more easily produced, so that he was accustomed to say "his life was in the hands of any rascal who chose to annoy and tease him." He still continued his active occupation, and in 1792 presented his last paper to the Royal Society, containing the results of his observations on bees, extending with interruptions over twenty years. He handed over to Mr. Home the responsibility of delivering his lectures, so that he might have more time to devote to the completion of his work, on "The Blood and Inflammation," which he did not live to see published.

Unfortunately, Mr. Hunter's relations with his colleagues at St. George's Hospital became exceedingly strained, and at a meeting on the 16th October, 1792, an observation he made was met by one of them with a flat contradiction. Hunter ceased speaking, retired from the table, and suppressing his

* Life of Hunter, page 31.

passion, hurried into the adjoining room where he fell lifeless in the arms of Dr. Robertson.

He was buried quietly in the vaults of St. Martin's in the presence of a few friends, but, sixty years later, in 1859, Frank Buckland having sought out the coffin containing the remains, it was removed to Westminster Abbey, on the 28th of March, and there re-interred in a manner befitting this gifted interpreter of the divine power and wisdom at work in the laws of organic life, and "founder of scientific surgery."

Hunter's appearance is familiar to us from the portrait by Reynolds, the beautiful engraving of it by Sharpe, the various busts and the marble statue in the museum. His vigorous build is well shown, but the extreme shortness of his stature is only realised when we remember Clift's marginal note in the copy of Home's "Life of Hunter" in the college library, where it is stated that his height was only 5ft. 2in.

Such is the mere skeleton of the life of Hunter, first brought before me in this very room, clothed in the eloquent diction of the second hero in my story of to-night.

I cannot, indeed, without a touch of genuine grief recall to mind my sitting here to listen to the impressive account of John Hunter placed before us by the then Orator, our much lamented friend and teacher, a vice-president of the Society, the late Sir Andrew Clark. Were another reason required for my selection of our traditional theme rather than one more germane to my every day life and study, it would be the association of the subject in my mind with that amiable and eloquent physician. I cannot allow the occasion to pass without taking the opportunity of coupling him with his illustrious fellow countryman.

Left without father or mother before he was old enough to know either, Andrew Clark was brought up by two paternal uncles at Stonemills, on the banks of the river Ugie, in the parish of St. Fergus, Aberdeenshire. His first schooling was acquired at that place, but when its educational resources were exhausted he next proceeded to the school at Peterhead, walking to and fro daily, a distance of several miles. Aberdeen University next saw him studying in one of its colleges, and it is said he was desirous of entering the Church, but this being opposed by his uncles, he betook himself to Dundee with the object of following his father's profession as a surgeon by entering the service of a medical man in that town. He appears to have gone through all the

drudgery of an apprenticeship, though not articled, chiefly under Dr. Webster, of Albert Court, Nethergate, Dundee. His first diploma was obtained in 1844, and is the membership of the R.C.S. of England. Towards the end of 1846 (as he says in a speech delivered at Dundee in October, 1885) he left that place. His academical medical education was obtained chiefly at Edinburgh, where he is credited with gaining first medals in anatomy, physiology, chemistry, botany, materia medica, surgery, pathology, and practice of physic. It is known that he studied under the renowned but awe-inspiring Hughes Bennett, with whom he seems to have been an unusual favourite, and to whom he owed the direction of his attention towards accurate pathological investigation. Sir Andrew used to relate with great glee his once "spotting" as potato cells certain microscopical objects in sputum which his professor was unable to identify. It has been freely reported that Clark acted as demonstrator to Dr. Robert Knox during his last course of lectures in Edinburgh, but as that gentleman's last course took place according to Lonsdale in 1842* and Clark did not leave Dundee till 1846, I fear that in this instance "the mythic with historic mingles."

Unfortunately symptoms of pulmonary tuberculosis, the disease to which he attributed the deaths of both his parents, threatened to mar his life, but with characteristic hope and courage he fought for his recovery, persevering with his work under the strictest self-imposed regimen as to food, air, and surroundings. He found benefit from a voyage to Madeira, and joined the Navy, but his voyages in that service were confined to those of the Victory, that is to say, he was on the books of Nelson's old vessel in Plymouth harbour, while he was employed as pathologist and instructor in medical microscopy at the Haslar Hospital. Here he first made the friendship of Sir Joseph Fayrer (who describes him as being then thin, pale, narrow-chested, and consumptive-looking, very Scotch, but extremely amiable and obliging, and, though reserved, a great favourite with everybody) and Professor Huxley—latterly the "troublesome patient," who in his autobiography speaks feelingly of Sir Andrew as his "kindest of doctors."

In 1853 a curator for the Museum of the London Hospital was required, and Andrew Clark was the chosen candidate.

* Life of Dr. Robert Knox, p. 257.

Here he threw himself *con amore* into the work of examining, arranging, and cataloguing the specimens, but his thoroughness was such that the progress of the catalogue was rather slow, and long before it was completed he was elected assistant physician to the hospital. His attention was therefore diverted from what he had considered his life's work—the preparation of a complete atlas of pathology,—and he devoted himself to practical medicine, studying disease in the living with all the greater success, because he had so thoroughly mastered its phenomena in the dead, on the dissecting table, and under the microscope.

While an adept in the methods of physical diagnosis, he made himself master of those peculiarities of his patients which transcend percussion or anscultation, and, by detecting and correcting departures from physiological life in habit, thought, or feeling, he was able to effect cure, relief, or consolation where so-called therapeutical medication would have been unavailing. His rational and skilful treatment of patients—as much as of diseases—was soon appreciated by people of culture and intelligence, and we find that his clientèle in Montagu Place, Bloomsbury, was recruited very largely from the literary and scientific classes. Twenty-four years ago he took the house in Cavendish Square, in which he practised with such dazzling success till the time of his death, which resulted from cerebral hæmorrhage, on November 6th, 1893, at a time when he had entered on the sixth year of his occupation of the throne of English medicine, the chair of President of the Royal College of Physicians. He was the recipient of many scientific honours, and was created a baronet in the year 1883, ten years before his death.

John Hunter was therefore born nearly a century before Andrew Clark, who died a century after him. Their lives were thus almost identical in length, and characterised by the same untiring industry. They both inherited phthisical dispositions, and both had to seek restoration to health and vigor by joining the royal services, the one in the army, the other in the navy. Their deaths were similar, inasmuch as they took place while the men, advanced in years, and at the very height of their professional success were still busily working with all the enthusiasm of boyhood, and all the courage and energy of the prime of life. No courage, however undaunted, no enthusiasm, however exuberant, can enable their owners to fight against the inevitable, and just

when their friends would most have wished them to live they were called away from the field of their labours. Many look forward to, and some arrive at, a period of rest and retirement in which to spend the last years of busy lives. Such men as John Hunter and Andrew Clark could never have rested, could never have retired. Must we deplore altogether that such soaring spirits were not spared to submit to the fetters of a senility which they were not born to brook?

The similarities between the two men are not, however, illimitable. Both were Scotchmen, typical to a degree, and of them Scotland and her sons must always feel proud, but the "*perfervidum ingenium Scotorum*" expressed itself in them in different ways. Hunter was rough, brusque, contentious, intolerant, careless in his diction, disliked by many, loved (though with an intensity amounting almost to worship) by few. Clark on the other hand was gentle, suave, conciliatory, charitable in judgment, finished to a degree in his literary style, beloved by all who knew him, and more and more the better he was known. Appropriate indeed and neat was the description given of him by the Cambridge orator, "suavem, eruditum, eloquentem." Both achieved success, and both as the result of honest work that nothing could conceal. In the case of Hunter, however, that success was attained in the face of many social and educational difficulties, and at the cost of much spite and enmity, which—as in the case of his post-mortem detractor, his self-styled biographer, Jesse Foot—even his death could not wipe out. Andrew Clark on the other hand was essentially a *persona grata*. His social graces and his refined culture made him acceptable to so many that he readily found ample scope for the exercise of his therapeutic skill and personal influence, where another perhaps equally equipped, from a scientific point of view, would, from want of his knowledge of mankind, have failed to attract the same clientèle, to attain to the same degree of usefulness, or to merit the same amount of gratitude. If Sir Andrew Clark's success was envied by many, it was grudged by none.

Though conciliatory in manner and in tendency, Clark was no laggard in war, but a doughty and pertinacious champion of any cause which he took up. As persistent in his efforts as Hunter, he never allowed his righteous indignation to betray him into unseemly or unbridled anger, whereas the other could not or would not restrain his vehemence of

temper, an outburst of which was, as we have seen, the cause of his final dissolution. Hunter seems to have been a *mauvais coucheur*, a "troublesome person" to his colleagues, in the first place, on account of his irrepressibility in his endeavours to introduce innovations and improvements into the teaching of surgery at St. George's Hospital, where one "did not choose to hazard his reputation by giving lectures," and another "did not see where the art could be improved." In the second place, he had an arrogant way of insisting on what he considered his rights, which prevented him from gaining that submissive acquiescence he might with more tact have readily commanded. If I do not misinterpret the accounts of his life it must be admitted that this blemish in his character became more marked as he got older. I feel sure that the coarseness of thought, word, and action characteristic of Hunter must have been intensely repugnant to Andrew Clark, great as was his appreciation of the man's original genius.

Both men, though indefatigable in writing and recording observations, published comparatively little—at least, comparatively little appeared during their lifetime. This was due solely, I believe, to their large-minded anxiety to avoid committing to print observations and opinions until they had tested and re-tested them in the light of repeated consideration and research. Hunter's contributions to the Philosophical Transactions and to the Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge were certainly numerous, but, during his life, the only books he published were his "Treatise on the Human Teeth," that on the "Venereal Disease," and a number of papers collated and issued as "Observations on certain parts of the Animal Œconomy." His great work, "A Treatise on the Blood, Inflammation, and Gunshot Wounds," was in the press but still unpublished at the time of his death. Much more of his material would now be at our disposal had it not been for the extraordinary action of his brother-in-law, Everard Home, who removed the manuscripts from the museum for the ostensible purpose of cataloguing them and deliberately burned them or professed to do so. The fact that Home after this communicated a most remarkable number of papers to the Royal Society, leaves an inference to be drawn which Sir James Paget does not hesitate to do. In a note appended to his oration (1877) he says, "He stole from the Hunterian manuscripts and then burnt them, after publishing many of

Hunter's observations as his own." "He became, I believe, the subject of one of those forms of senile degeneration in morality, against which all men growing old need to guard."

Of the works which Hunter has left behind some have been already alluded to. The most suitable for our perusal is, no doubt, his course of Lectures on the Principles of Surgery, compiled from the notes of his students. Here we find what is allowed to be the first attempt to build up the science on certain first principles, starting with the phenomena of organization and life, and the distinctions between them, the author endeavouring to define the latter, but being driven to admit that "of all things on the face of the earth definitions are the most cursed; for if you make a definition you may bring together under it a thousand things that have not the least connection with it." The earlier part of this work seems to me more instinct with the man's speculative tendency than the more concrete and practical portions which follow. In it we find the evidence of that deductive leaning, which Buckle* ascribes to his Scottish nationality, and which was perhaps, fostered by his brother, the intimate of Cullen. Contending with it, and, as I believe, with advantage, was his inductive practice, acquired, as Buckle further suggests, through his residence among English workers and followers of Francis Bacon. Errors of observation, surprising in the light of our present knowledge, have frequently crept in, but without detracting from the brilliancy of his method of work, the influence of which is not yet, and never can be altogether lost.

When studying Andrew Clark's writings the reader is irresistibly carried along from point to point, so fascinated by the lucidity and terseness of the diction, that he is almost disarmed from criticising statements so clearly expressed and inferences so logically deduced. He is saved the trouble of thinking, and indeed, can hardly stop to think. In the case of Hunter it is a very different matter. The phraseology is laboured, often at the first glance obscure. Though obviously by no means "easy writing," it is frequently what Byron would call, "Damn'd hard reading." It is often necessary to stop, read again, and try back, before eliciting the meaning of the utterance. One has, in truth, to think for one-self while so engaged, but there is ample recompense for the trouble in the treasures of fact, inference, analogy, and ap-

* History of Civilization in England.

plication, with which every page is positively packed.

Sir Andrew Clark has told me with some pride that he attained his position without having written a book, attributing his success simply to his habit of doing his very best for every patient who came under his care. At the same time he was a not unfrequent contributor of monographs to the Societies and periodicals, and amongst these the ones he considered the most important were, according to Professor Delépine, his early researches on the exudation corpuscle (anticipatory of Reinhardt), *Lond. Med. Gaz.* xlii., xliii. ; on the presence of elastic tissue in tuberculous sputa, Path. Trans., vi., 74 ; on the structure of the lungs, Dr. Davies on Physical Diagnosis, 1854 ; on the inflammatory non-tuberculous forms of phthisis . . . . . on fibroid phthisis, Clin. Trans., vol. i., p. 174 ; on renal inadequacy, *Med. Times*, 1873, vol. i, p. 1 ; *Lancet*, 1879, vol. ii., p. 800 ; *B.M.J.*, 1879, vol. i., p. 345 ; on the tonsils, *Lancet*, 1856, vol. ii., p. 463 ; on mucous disease of the colon, *Lancet*, 1859, vol. ii., p. 614 ; on fæcal anæmia, *Lancet*, 1887, vol. ii., p. 1003 ; *B.M.J.*, 1887, vol. ii., p. 1106 ; but the complete list is far more extensive, and for it I must refer you to the "Sketch of the Life and Work of Sir Andrew Clark" in the *Journal of Pathology* for March, 1894, by Professor Sheridan Delépine, to whose kindness I am indebted for the privilege of perusing an advance proof.

At the time of his death there was, however, in course of production, a volume on Fibroid Phthisis, a joint publication by Drs. Hadley and Chaplin along with himself. It embodies his views on this rare form of pulmonary disease, a case of which he brought before the Clinical Society in 1868. The pathology, symptoms and treatment were expounded at the London Hospital in those of his instructions as Emeritus Lecturer on Medicine, which are published in the *Lancets* for January and July, 1893, and January, 1894. Some may have heard him declare himself a "trinitarian" in phthisis, a believer in the tuberculous, the pneumonic, and the fibroid forms. The work is at present in an advanced stage of preparation, and its publication will be awaited with interest.

One of his most valuable works is, in my opinion, his statistical and clinical account of "Cases of Valvular Disease of the Heart (684 in number) known to have existed for over five years without causing serious symptoms," read before the British Medical Association at Brighton (*Brit. Med. Journal* 1887, Vol. i.), a monument of patient observa-

tion and of well-founded conviction, and a source of comfort and renewed life to many sufferers.

In the two histories I have thus briefly sketched and compared we have as striking instances of conspicuous success in medical life as one could select. In this aspect the life of the medical man has points peculiar to itself. It may be stated in the rough that in business as such, a man's success may very fairly be gauged by the amount of money which he has made. In ours alone of the utilitarian avocations can one be eminently successful, and yet have accumulated comparatively little. It is hardly conceivable for a lawyer, a stockbroker, an engineer, or a merchant to be great and successful in his calling without his having made money. It was long before John Hunter made a thousand a year, and we find that after his death his wife and family were dependent for two years on the King's bounty. Many a physician and surgeon has flung himself heart and soul into work which has made invaluable additions to the sum of human knowledge, and yet has found his recompense not unfrequently in the joys of discovery, and in the recognition of the value of his labour by his fellows, rather than in that more solid reward which alone is acceptable in other fields. Such workers there will always be in the world of research, as of art, patient, laborious enthusiasts, the fruit of whose toil is often utilized by him who turns it to practical account. In less conspicuous positions we find many practitioners, happy in their profession, frugal in their habits, working unselfishly for the scantiest or no return for the benefit of poor and often querulous, sometimes ungrateful, fellow creatures. I do not, however, hold this up as the only ideal for your admiration. As Burns says, "Epistle to a young friend" :—

> "To catch Dame Fortune's golden smile,
> Assiduous wait upon her,
> And gather gear by ev'ry wile,
> That's justified by honour ;
> Not for to hide it in a hedge,
> Nor for a train-attendant,
> But for the glorious privilege
> Of being independent."

I believe that with the same amount of intelligence, study, energy, and capital, a man may make more money in a commercial pursuit, but taking the medical profession on the average the reward to the worker is at least a fairly respec-

table one. The successful commercial man who desires to prevent his nature from being "subdued to what it works in," has out of business hours to seek, and sometimes in vain, for means of elevating his thoughts and feelings by the active or passive participation in artistic, literary, or philanthropic pursuits. The doctor, however humble his position in the profession, is in no such need as long as he carries on his work in the true spirit. Has he a bias towards scientific pursuits, the search for truth in his daily work will give him ample material. Is he of a literary disposition, he has no trouble in finding subjects for his pen, for truth is stranger than fiction, and there are few lives more full of strange experiences than a doctor's if he has the scent for the strange, the romantic, and the beautiful. Are his aspirations for the cultivation of the higher moral life guided thereto by pure undoubting faith in Him who taught the law of love, or on the other hand by the spirit of noble altruism which animates and redeems the best of those who bow only to knowledge? In no other walk of life can he find more opportunities for modes of thought which make for righteousness and for those forms of action which prove the aspirant's advance and make his further progress towards perfection all the easier.

Now you may ask me if this is not merely the old sentimental philosophising intended to bolster up and regalvanise the fetish of the so-called "dignity of the profession." There are many ready at all times to stick it up and light a bonfire and dance round it, shouting and singing about it, and all the time doing no single thing to place it on a solid foundation. There *is* a dignity of the profession if what is professed is practised. The want of dignity is in those who profess what they do not practise, and who lay claim to a share in the respect due to an inherently noble calling without having individually done anything to deserve it. It is not enough to rest content with being a member of a dignified profession, each one must take his part in fostering, in maintaining, and, if possible, in adding to that dignity. This duty is the more incumbent on those who respect themselves and honour their calling, as there are not a few who are ready to take advantage of the traditional confidence placed in the medical adviser as such, and to substitute arrogance, bluster, prevarication, or hypocrisy for the confidence of skilled knowledge and the large-souled humanity of the true follower of Hippocrates. Well did the framer of the famous

oath know the temptations to which his disciples were exposed. Well do we all know them, and when we see as we occasionally do the failings of some wicked or weak brother placarded in posters or paraded in the public press we do not say "How strange that such occurrences are so common" but "How strange that they are so rare!" Let us take a pride in the comparative social purity of our profession, and watch and pray that we fall not into temptation.

In some men there are inborn such qualities as patience, equanimity, generosity, and love for others, as the result of hereditary transmission, or of early precept and example. These virtues I do not believe to be inherent in us as members of the animal kingdom, they are acquired in spite of nature, and we must not be surprised if nature sometimes asserts herself—*tamen usque revertitur*. Their possessor, however, cannot conceal them, they invest his every action with their worth and beauty, they add an unspeakable dignity and charm to the outwardly courteous, they make themselves felt even in the most reserved and rough-mannered. In Andrew Clark and John Hunter these excellences were present, and in the former lay at the foundation of that charm of manner which we all know so well. In Hunter they were conspicuous, in spite of an uninviting and often repellant brusquerie and reserve. Perhaps we are all the more on that account fascinated by the unmistakable evidences of his goodness of heart, for his generosity is well-known. Can I instance a more touching example of unworldly kindness than in his offer to poor Lynn.* The latter was suffering from the effects of a dissection wound, and in need of such rest and change as was presumably beyond his means. Hunter, touched with pity, pressed on him the loan of two hundred pounds, which Lynn gratefully declined, saying that for the moment he was able to meet all his expenses, but that if he found himself in need he would gladly avail himself of the offered assistance. "Nay," said Hunter, "what I offer I will do now, but what I may be able to do a week hence it is impossible for me to say." It adds to the value of the narrative, that on Lynn's recovery Hunter had quite forgotten the incident. In his letters to Jenner we find a Rembrandtesque mixture of spontaneous kindness and roughness of manner.

His patient industry is so amply proved and so fully

* Ottley's "Life of Hunter," and Abernethy's "Hunterian Oration."

recognised by both admirers and detractors—even Jesse Foot admitting that "he had an uncommon turn to industry"—that illustrations are scarcely called for. It is known that he was early in his rising, late in retiring to bed. He would do several hours' work in his museum before his nine o'clock breakfast, and we are told of his making an appointment to receive a gentleman, who was coming with an introduction to him, for five o'clock in the morning. The gentleman was punctual to time, and found Hunter hard at work on his arrival. He received patients up till twelve o'clock, and then started on his rounds, his punctuality in keeping his appointments with his professional brethren being most exemplary. He dined sparingly at four, and after an hour's sleep spent his evening in work, employing his amanuensis up till midnight, and continuing alone till one or two in the morning.

It is not strange that with such a mode of life a periodical break-down of health should be recorded, but how otherwise could he have acquired that solidity of knowledge which brought him to the front in spite of his obvious defects of manner, and led to his being recognised as the highest authority to whom both physicians and surgeons could appeal in cases presenting pathological difficulties. How otherwise, we may ask, could he possibly have collected, prepared, and classified that monumental museum, of which the world cannot produce the parallel.

Of Sir Andrew Clark's industry we have ample evidence. His sustained habits of early rising are well-known, and he was accustomed to be in his consulting room at or soon after eight every morning. Very short time was occupied in his comparatively simple meals. The enormous number of patients whom he saw, and the quantity and fulness of the correspondence he carried on in his own hand, were phenomenal. He attended his hospital practice with regularity if not absolute punctuality, even when he had arrived at such a position that his doing so involved a palpable loss of time which might have been lucratively employed. But once there his clinical enthusiasm would boil up, and, forgetful of the flight of time and subsequent engagements, he would throw himself heart and soul into the interest of the moment. Many will remember with what a glow he would declare that it was only there one could learn; quoting Sydenham's familiar phrase, "*tota ars medici est in observationibus.*" To learn, was with him a habit, and thus he

preserved that boyish receptivity which saved him from senility. "I am *not* old," he playfully but forcibly protested, when reference was made to his advancing age in a complimentary after-dinner speech not many years ago. His work was his refuge from age. His aim was to work like a young man and to take a young man's pride in his work, preserving the vivacious enthusiasm of youth without its frivolity and the wisdom of age without its solemnness. He was always cultivating his mind by association with the persons and writings of the highest thinkers. Out of his professional work which he prosecuted as well on his journeys as in his study, writing, if necessary, on an improvised desk, his chief studies were directed towards the solution of questions in theology and metaphysics, his devout nature finding support and solace in an undisguised faith which allied him less to John Hunter than to his blameless brother William.

Another point in which these two men, otherwise dissimilar, resembled each other was their scrupulous attention to minutiæ. They well illustrated the principle that the man who is to succeed must not only be industrious, but he must have *an almost ignominious love of detail.* Hunter's minuteness in anatomical details is extraordinary, and as an instance of great interest, I would draw attention to his paper on the nerves connected with smell, and particularly to his tracing part of the Vidian nerve through the great superficial petrosal to the chorda tympani, thus early demonstrating the route followed by impressions of taste as demanded by the clinical and experimental discoveries of comparatively modern neurology.

The minute attention given by Clark to details of dietary regimen and conduct are now proverbial not only in the profession but among the laity, and those who formerly felt tempted to smile at them have learnt to appreciate their value and have not hesitated to adopt them.

The crowning triumph of Hunter's life was the relative completion of his museum, the cataloguing of which he never saw finished, and which was a labour of love to such men as Clift and Owen. The conception of the plan is enough to command our admiration, the actual realization of it claims immortal renown for its great author. It is allowed by visitors from all parts of the globe to surpass anything of the kind to be found elsewhere, and it is continuously becoming more complete and more valuable.

I consider it no sacrilege to state that the art of dissection has made considerable strides since the days of Hunter, if we compare his preparations with those emanating from the hands of those skilled artists, who, if inspired by the memories of the great surgeon, are directed by the conservator, Prof. Stewart, whose exceptional knowledge of the invertebrata bodes well for a reorganization of that part of the natural history museum. The museum is chiefly visited by students preparing for examinations, by savants interested in particular branches, and by lay open-mouthed gazers. Many of us may at different times have answered to each of these descriptions, but it is the lot of few to examine it as students of nature in the large, like our former orator of 1877, the late Dr. Walter Moxon, who devoted to it four entire months, working daily from ten in the morning till four in the afternoon. It is, however, well worth the while of any fairly educated practitioner to make a methodical survey if only to seek inspiration at the shrine of a hero. Before starting it is necessary to have a clear idea of the general plan of this work.

Commencing at No. 1 in the Physiological department, the visitor, student, or pilgrim will find the following order of things :—

First Division—Illustrative of the functions which minister to the necessities of the individual.

First Sub-division—Illustrating the subject of *locomotion* including the component parts of vegetable and animals, coverings of the body, mechanical arrangements, &c.

Second Sub-division—*Digestion* and the organs connected therewith in all classes, absorbent organs of circulation and respiration, and excretive and central nervous system, followed by the organs of the senses, &c., &c.

Second Division—Illustrative of the function of *reproduction* from the lowest to the highest, including the structure of the male organs, of the female organs in the unimpregnated and impregnated condition, the development of the ovum, the growth and means of nourishment, and protection of the young.

The specimens of human and comparative osteology are numerous and valuable, but the skeleton of Charles

Byrne, the Irish giant, who measured 8ft. 4in., is, I need hardly say, the most sensational.

Teratology is also well displayed.

Pathology is illustrated by a collection of specimens of general pathology, illustrating the various morbid processes and experiments bearing on them, including the historical transplantations into the cock's comb of a human tooth (Nos. 103 and 104), a cock's spur (Nos. 107 and 108), &c.; then one of special pathology, containing specimens of diseases as affecting the various organs in their order.

The natural history collection is only partly displayed and its rearrangement is pending, but, in the meantime, its value is easily appreciable on the most casual inspection. It will interest many to look at a "pentacrinus caput medusæ" for which John Hunter gave fifteen guineas at the Duchess of Portland's sale.

Among the pathological specimens the following have more than a merely scientific interest :—

In two of the jars (Nos. 153-4) may be seen specimens sufficiently unattractive to the casual gazer, but in which our medical Chrysostom—he of the golden-mouth—has found a fit subject for his eloquence. Of these dried pieces of hog's intestine containing gaseous cysts Sir James Paget has written* : — "These should be admired or almost venerated ; for their histories include the honourable names of Hunter, of Jenner, and of Cavendish. Mr. Hunter says of them :—'I have a piece of the intestine of a hog, which has a number of air bladders in it. . . . It was sent to me by my friend, Mr. Jenner, surgeon at Berkley, who informed me that this appearance is found very frequently upon the intestines of hogs that are killed in the summer months. . . . Mr. Cavendish was so kind as to examine a little of this air, and he found [it contained a little fixed air, and the remainder not at all inflammable, and almost completely phlogisticated].'

"What a relic we have here ! Surely, never on an object so mean to common apprehension, did such rays of intellectual light converge as on these to which were addressed the frequent and inquiring observations of Jenner, the keen analysis by Cavendish, and the vast comparison and deep

* "Surg. Pathol.," 3rd ed., p. 402.

reflection of John Hunter! Surely, never were the elements of an inductive process combined in such perfection! Jenner to observe, Cavendish to analyse, Hunter to compare and reflect."

Another specimen (No. 345) is a huge conglomerate cartilaginous parotid tumour weighing nine pounds and measuring in its longest diameter nine inches by seven. It is one "to which, among all the specimens of the kind," says Paget (loc. cit., p. 521), "the primary place belongs. It was removed by Mr. Hunter, and is enough to prove the skill and boldness as an operator which some have denied him." The tumour was larger than the head of the patient, John Burley, from whom it was removed.

The history of operations for aneurism, especially popliteal aneurism, is so identified with John Hunter's name that it is no wonder the specimens illustrating it afford food for profound interest and reflection. Two are pointed out by Sir James Paget (op. cit., p. 26) as being as interesting in the history of surgery as in pathology. "One is a tibia and fibula, the lower ends of which, together with the whole foot, perished in consequence of the obstruction of the circulation by an aneurism in the bone." It is an Hunterian specimen in the College Museum (No. 710); and surely we may imagine that sometimes Mr. Hunter would contemplate it with pride to think how rare such things would be in after times. In strong contrast is this other specimen. "The limb of a man who once had an aneurism, like the one which in the former case was so destructive, and on whom Hunter was permitted to confer fifty years of healthy life by his operation of tying the artery at a distance from the diseased part." The specimen indicated by Sir James as 3472A is, I have no doubt, the one now marked 3259. The artery remains as merely a thick fibrous band extending from the profunda to the bifurcation of the femoral. The collateral vessels are enlarged to a considerable extent, the most noticeable being the one accompanying the sciatic nerve. The aneurismal sac remains merely as an almost indistinguishable hard olive-shaped mass. The patient was aged 37 at the time of the operation, and was the fourth on whom Hunter performed it.

The subject of aneurism is further illustrated by No. 3258, the femoral vessels of a coachman who died fifteen months after the operation. The artery is seen to be obliterated from the origin of the profunda down to the seat of the ligatures —four loose ones in the sheath of the quadriceps—where

there is a calcareous plaque. Below this the vessel was pervious and filled with blood down to the sac, but the opening into this is obliterated. The sac was much smaller than at the time of operation, and was filled with a firm adherent clot. The patient had been able to return to his work.

In considering the museum as a grand and orderly congeries, it must strike the observer of what simple every day material many an isolated specimen consists. Things that a practitioner throws away almost daily became invested with intense interest when scrutinised by Hunter. Even now most of us have materials passing through our hands, specimens of every day pathology, anatomy, or natural history, of which we cannot appraise the value, and which alone are, perhaps, of little consideration, hardly to us worth lumbering our shelves. Let us give the museum authorities the opportunity of declining or accepting them, accompanied by a plain statement of the circumstances of the case, and feel pleased if at any time we can fill a gap in that collection of which the nation is justly so proud.

It is necessary to consider what were the circumstances which influenced these men and led to their extraordinary success in their respective modes of thought and spheres of action. Without doubt John Hunter was indebted to his brother William for his indoctrination into the lines of study in which he so distinguished himself. William, his senior by ten years, the pupil and close friend of the illustrious but speculative Cullen, was a cultured scholar, a ripe student, a fellow-worker with Smellie—the immortal deviser of the famous forceps lock—polished by foreign travel, during which he became familiar at Leyden with Albinus, the great anatomist, and his modes of preparing tissues. How great must have been the delight to this successful and affectionate scientist to listen without jealousy to the outbursts of original thought on the part of his younger brother, characterised as they were by the wildest freedom from traditional prejudice, and to verify or correct them in the light of his more conventional, though more scientific knowledge. Many a time, too, must he have felt and tried to stifle a pang when his brother's illiteracy forced itself on his attention. While admitting that the disinclination to read may in geniuses like Hunter and Bichat lead to greater freedom in originating truths and to the study of nature rather than of other men's work, I am sure you will agree

with Sir Wm. Savory's remarks in his Hunterian Oration for 1887 :—" My conviction is that if Hunter had received a good general education in early years he would have been all the better for it. He would have lost nothing. His mental powers could have been in no way impaired, but on the contrary, enhanced. He would have recorded the result of his labours in better order, with more light, and greater effect ; and we should have had the advantage of a clearer revelation of his thoughts."

Andrew Clark had the advantage of receiving a sound education while living in circumstances, which, though by no means poor, were certainly far removed from that luxury which in southern regions so often enervates those to whom alone a classical education is vouchsafed. In Aberdeenshire, I am informed, a large amount of money has for a great length of time been " mortified " for the sake of endowing schools and affording stipends to schoolmasters higher even than those received by the clergy. Hence, men of high-class ability and academic standing are ready to conduct the schools of even the smallest parishes. As a most notable instance, I may cite the Reverend William Nevin formerly schoolmaster of the parish of Crimond, a few miles from St. Fergus. This gentleman, son of comparatively humble parents, educated his three brothers, all of whom attained the highest distinction at the University of Cambridge, he himself being now the minister of a very large church near Edinburgh. I attribute much to this *genius loci*, for how otherwise could we account for the preeminence of such men as Andrew Clark, Professor Ferrier, Dr. Mitchell Bruce, Dr. Wm. Bruce (our representative for Scotland on the General Medical Council), the late Dr. Matthews Duncan, Dr. Silver, and last, but not least, our irreplaceable James Anderson, all born within a comparatively small area. Good education, freedom from luxury, habituation to industry, and self-denial, these are the factors essential to the formation of character and ability like theirs.

In the light of their complete or partial success, we may well try to emulate those qualities which have led to their advancement and to avoid those errors which have in any given case prevented it from being greater.

First and foremost comes the self-evident necessity for that professional skill which only earnest thought and industrious practice can procure. No general culture or refinement of manner will take the place of this. In this respect

we can ask for no higher examples than the two on whom I have so long dilated.

Over and above this it is desirable if not indispensable to possess a certain measure at least of that interest in professional work and that sympathy with the objects of it without which neither the intellectual nor the emotional part of the man can be satisfied, whether his heart be on his sleeve or concealed under a rough exterior. In both this was present, but in Hunter's case one can only regret that its effect was marred by defects of manner, while rejoicing to observe how in Clark it was enhanced by his pleasing personality. I must protest against an affectation or assumption of a sympathy which is not real, but our natures are plastic, even in age we may mellow, and by intentional cultivation—not of the manner but of the feeling—we may succeed in moulding our character so as to arrive at a state of sympathetic emotionality which cannot be concealed, but which in spite of us imparts that tone to our manners and actions which attracts others to us and procures us opportunities for the exercise of our greater gifts. Let us emulate the generous large-mindedness of Hunter no less than that of Clark, but let us always remember the sympathetic courtesy which radiated from the one we have known so well, fortunate indeed if we have caught some of its magic.

In thanking you for your kind attention to my remarks allow me to hope that I may have been instrumental in directing attention, however feebly, to two characters the contemplation of which should bring courage and comfort in moments of doubt or weakness. If, perhaps I have failed, I shall however never cease to feel glad that your selection of me as your orator for this year has led me to enter on the inspiring study of the life and works of John Hunter and Andrew Clark.

HUNTERIAN SOCIETY.

FEBRUARY 22nd, 1893.

WALTER RIVINGTON, Esq., M.S., delivered the first Hunterian Society Lecture for the session, entitled—"Certain Branches of Operative Surgery," a full report of which is to be found in the *Lancet*, 1893, i., p. 701.

MARCH 8th, 1893.—Clinical Evening.

DR. F. CHARLEWOOD TURNER showed the bladder, ureters and kidneys of a patient who suffered from albuminuria. The bladder was hypertrophied and dilated; the ureters and renal pelves were dilated, with marked atrophy of the pyramids, especially on the left side, but no stricture or other cause of obstruction could be found.

DR. F. C. TURNER also showed a kidney, the lower portion of which was converted into cysts, suggesting a cluster of dilated infundibula. These cysts were filled with clear serum, were lined by a smooth membrane, and contained a minute uric acid calculus. He thought that there had been calculous disease, ulceration, and subsequent cicatrisation and occlusion of an infundibulum with cystic dilatation subsequently. The adrenal of this kidney consisted of cysts more numerous than those in the kidney and filled with creamy material.

DR. F. J. SMITH asked whether there was any kinking of the ureter in the second case, and whether the condition could possibly have been congenital.

DR. GALLOWAY suggested that the adrenal cysts were tubercular, and asked whether there was any other evidence of tubercular disease.

Dr. Turner said that the ureters were dilated in the first case and healthy in the second case, there was no kinking. He was not acquainted with a caseous cystic form of tuberculosis in the adrenal, but caseous cysts of the kidney were common.

Dr. F. J. Smith showed a tubercular bladder, ureter, and kidney, from a footman, aged 27, who was first admitted into the City Road Chest Hospital in September, 1892, with some wasting and other doubtful signs of phthisis. He improved and was sent to the seaside. He was readmitted subsequently and gradually sunk. The urine showed a trace only of albumen and never contained pus. The bladder showed three ulcers typically tubercular, the left ureter was completely occluded throughout its whole length by tubercular thickening and was in parts converted into a fibrous cord. The kidney was filled with caseous material. Dr. Smith remarked that this specimen proved the possibility of the existence of tubercular kidney without pyuria. The other kidney was healthy.

Dr. Baker supplemented the clinical history.

Dr. Percy Warner asked whether Dr. Smith's experience agreed with that of Dr. Sutton, who stated that a sudden profuse hæmaturia was pathognomonic of tubercular kidney.

INTESTINAL HÆMORRHAGE.

Specimen shewn by Dr. Cotman.

The spleen and intestines of a man who had been subject to occasional attacks of profuse hæmorrhage from the lower part of the alimentary canal for four years. The patient was married, the father of two children, and aged 30. He was first seen by Dr. Cotman, in January, 1892, when he was extremely anæmic, but denied any attack of hæmorrhage. In December, 1892, he was again a patient under Dr. Cotman, complaining of diarrhœa, melæna, and increasing weakness, astringents failed to check the hæmorrhage and he died from consequent exhaustion.

Dr. James Galloway, to whom the specimen had been submitted, described it as follows :—The spleen was enlarged, weighing 16 ozs., its capsule and whole pulp was fibrous and densely sclerosed. The epithelium of the intestinal tract was digested by the spirit in which

the specimen had been placed, but the submucous tissue showed marked signs of leucocytosis and congestion. He submitted that this case was either one of chronic leucocythæmia with intestinal hæmorrhage, or of pernicious anæmia. He drew attention to the difference in the condition of this spleen from the enlarged, softened, pulpy spleen of acute septicæmia, and stated that he had lately seen two cases of acute streptococcus poisoning, with death in four days, in nurses.

Dr. F. J. Smith mentioned two cases of death from intestinal hæmorrhage, one a woman, the subject of cirrhosis of the liver, and the other, a man, suffering from phthisis and who had an ulcer of the stomach. He would ask, therefore, whether there was any ulcer of the stomach, any piles, or cirrhosis of the liver in this case.

Dr. Hingston Fox mentioned a case of hæmorrhage from the alimentary canal due to renal disease, and said that in this case there was the same peculiar raspberry-like smell, and suggested that it was due to the decomposition of the blood and consequent sapræmia.

Dr. Cotman said that the hæmorrhage came from the colon below the hepatic flexure; the stomach was not examined, there were no hæmorrhoids.

Dr. J. Galloway mentioned a case of pernicious anæmia of four years' duration, lately dead of intestinal hæmorrhage.

MYELOID SARCOMA OF THE HEAD OF THE HUMERUS INVOLVING THE SCAPULA.

Specimen shewn by Mr. Openshaw.

The specimen was obtained, by operation, from a postman's wife, whose symptoms, pain and swelling about the shoulder, had lasted for three months. The entire upper limb, including the scapula and outer two-thirds of the clavicle, were removed on March 14th, 1892, after ligature of the subclavian artery and vein. The patient was five months pregnant when operated on, and was in July confined of a fully grown infant; the infant was born with some thickening of the centre of the humerus (left), the subsequent progress of which demonstrated it an intraperiosteal fracture, and not a sarcoma.

Dr. F. J. Smith and Dr. Hingston Fox congratulated Mr. Openshaw on the success of the case.

MARCH 22nd, 1893.

VENESECTION IN THE TREATMENT OF SYMPTOMS ARISING FROM THORACIC ANEURYSM.

Paper read by Dr. G. Newton Pitt.

Dr. Pitt detailed the symptoms, and offered explanations as to the cause of each, viz. :—(1) *Paroxysmal cough*, due to pulsation of the aneurysm on a bronchus or the trachea, to collections of mucus in the bronchial tubes, to irritation of the recurrent laryngeal, or due to distension of an aneurysm, or to the dilatation of the right ventricle from exhaustion or exertion. (2) *Pain*, caused by erosion of bone, or to pressure upon nerves, or to angina. (3) *Coma*, due to diminished pressure in cerebral arteries, or to congestion of brain from pressure on superior vena cava. (4) *Dyspnœa* from paralysis of recurrent laryngeal nerve, etc. (5) *Dysphagia* from pressure on œsophagus. Dr. Pitt believes that each of these symptoms may be relieved by venesection. He detailed notes of the following nine cases, which had come under his observation, some of which were under the care of his colleagues at Guy's Hospital, to whom he was indebted for permission to publish them. In these nine cases venesection was performed once or frequently, and generally with more or less permanent benefit.

Case 1.—Male, aged 27. Admitted with paralysis of left vocal cord. Angina. Dyspnœa, with evidence of pressure on left bronchus. Was ordered Pot. Iod. and rest, without benefit. Attack of dyspnœa on August 12th. Venesected to 12 oz. Next day dyspnœa ; venesected 12 oz. Relief for three days, then another attack of dyspnœa, and death before he could be again venesected.

Case 2.—Male, aged 34. Admitted with thoracic aneurysm pulsating in second right intercostal space, and aortic regurgitation. Pot. Iod., and rest for one month. Pain continued. Attack of dyspnœa and pain a month later ; venesected to 15 oz., with much relief. No further dyspnœa, or pain ; pulsation became less. Left hospital much improved.

Case 3.—Male, aged 55. Admitted with aortic regurgitation and thoracic pain of three months' duration. Venesected to 15 oz. Low diet and Pot. Iod. He took one pint only of fluid daily. Two months later, attack of dyspnœa, which was unrelieved by chloroform, amyl nitrite, etc. Venesection was attended with marked, but temporary, relief. He died after subsequent venesections.

Case 4.—Male, aged 60. Under the care of the late Dr. Moxon. Admitted for pain of eighteen months' duration, a pulsating tumour over second intercostal space of six months' standing, and evidence of pressure on bronchus. Treated by low diet, etc., but pain continued, so he was venesected to 6 oz., and the aneurysm diminished in size. Subsequent venesections to 10, 6, and 12 ozs. He left hospital with very little pulsation, less projection, and less pain.

Case 5.—Male, aged 43. Under the late Dr. Fagge. Admitted with thoracic pain of three years' duration, and a pulsating tumour of two years' standing. For a time he improved by repeated venesections, but pain and cough returned, the aneurysm increased in size, and death ultimately ensued.

Case 6.—Male, aged 34. Suffering from aneurysm and aortic regurgitation with rapid pulse and cardiac failure. Distinctly relieved by venesection, often repeated during four months.

Case 7.—Male, aged 46. Under Dr. Wilks. Admitted for severe attacks of dyspnœa of six months', and aortic incompetence of two months' duration, a large pulsating tumour on the right side, and paralysis of left recurrent laryngeal nerve. Venesection on many occasions definitely relieved the dyspnœa, and on three occasions patient was restored from a deeply comatose condition by the venesection. Death ultimately ensued.

Case 8.—Male, aged 50. Thoracic aneurysm of two years. Aortic incompetence. Attacks of coma. Definite relief by repeated venesection. Venesection was repeated twenty times in all.

Case 9.—Male, aged 42. Thoracic pain for two years. Pulsating tumour three years. Great dyspnœa, cough, relieved for a time by leeches, opium, Pot. Iod., rest, etc. Ultimately venesection at intervals with decreasing relief to dyspnœa till death.

Dr. Pitt would treat Thoracic Aneurysm by rest, by as limited an amount of fluid as the patient can comfortably do with, Potass. Iod. in gradually increasing doses, and he thought venesection was definitely useful in relieving cough, dyspnœa, and acute pain. He advised venesection for this palliative purpose only, and not with a view to promote the consolidation of the aneurysm by clot.

Dr. F. J. Smith asked what the dyspnœa was due to, and was it not dangerous to bleed so frequently. Was it the slightest use to limit the fluids taken? He thought that the blood pressure was not in the least influenced by either feeding or bleeding until a dangerous point was reached. He mentioned a case of improvement under Pot. Iod.

Dr. F. C. Turner thought there could be no doubt that blood pressure was affected by diet limitation, and that the recumbent position reduced the pulse rate, so he would keep a patient with aneurysm in bed.

Dr. G. N. Pitt would give a patient a nutritious diet. He thought blood pressure was reduced by limitation in diet, recumbent position, and venesection. He would advise rest in bed in acute stages. He thought dyspnœa was frequently caused by pressure on the bronchus by the distended aneurysm, and venesection, he thought, acted by reducing this pressure.

CHEYNE-STOKES' RESPIRATION, RECOVERY.

Notes of two cases read by Mr. Rowland Humphreys.

Case 1.—Mrs. M., aged 71. After Influenza she developed bronchopneumonia, during which she received a severe mental shock, then cerebral symptoms came on, acute delirium, cyanosis, and for seven weeks she lay in this condition with Cheyne-Stokes' respiration. Ultimately she recovered after injections of Morphia and Atropine.

Case 2.—Miss M. S., Epidemic Influenza, bronchopneumonia, Asthma. Cheyne-Stokes' respiration supervened, she ultimately recovered, being much relieved by inhalation of oxygen.

Remarks.—Dr. Humphreys thought stimulants of no use in these cases, he recommended sedatives. He suggested that the phenomena of Cheyne-Stokes' Respiration were due to the irregular stimulation of the two halves of the respiratory centre. He had noticed that at first only the upper part of the chest seemed to move, but that as the respiratory movements quickened, they deepened, and more of the chest wall seemed to move. He thought Cheyne-Stokes' phenomena were generally preceded by irregular and rapid breathing, and were accompanied by cerebral complications. The only other drug of use besides those mentioned which he knew to be of use was Paraldehyde.

Dr. Hingston Fox illustrated the fact that Cheyne-Stokes' respiration is not necessarily fatal by relating the case of an old lady suffering from influenza and bronchopneumonia, who had Cheyne-Stokes' respiration for a whole night but recovered. He asked what was the length of the pause, and the length of the whole cycle.

Dr. Dundas Grant mentioned another case of bronchopneumonia and Cheyne-Stokes' respiration with recovery which occurred in his practice.

Mr. John Adams read notes of two similar cases, both of which recovered. He thought that over stimulation was better than under stimulation, but hoped for further light on the subject.

Mr. Humphreys replied. He agreed that over stimulation was present. He remarked that the rate of breathing rose for about 25 seconds and

fell for 25 seconds, with a pause for 10 to 12 seconds. He quoted Landois and Stirling in favour of the two centres theory, and said in reply to Dr. F. J. Smith that the patient did not know much about her subjective feelings. Morphia was indicated if the pulse was proportionally too slow, when the respiration increased.

Dr. F. C. Turner read notes of a case of acute strangulation of the ileum by an omphalomesenteric band, successfully relieved by operation, 48 hours after the onset of symptoms :—

Wm. D., aged 12, was suddenly taken with abodminal pain and vomiting after his dinner on August 8th, 1892, which symptoms continued until relieved by operation on August 10th.

His bowels had been opened naturally on the morning of August 8th and again on August 9th, before his admission to the London Hospital that afternoon.

When admitted the boy was in a state of collapse, and face pallid with anxious expression. He complained of pain in the belly, and vomited frequently.

There was no marked abdominal distension, or tenderness to palpation, and I was unable to find evidence of any local lesion. He lay with legs extended and could move them, and turn in bed, without pain.

The following day, August 10th, his condition remaining the same, and unrelieved by enemata, which had, however, been followed by a passage of fæces, Mr. Percy Dean, at my request, saw the case with me. Some flatness of percussion note in the right iliac fossa was then perceptible, and Mr. Dean by gentle pushing with the tips of his fingers between the umbilicus and the anterior spines of the right ileum, was able to make out some local sensitiveness there. He advised an operation without delay, which he performed that afternoon.

Opening the abdominal cavity in the median line below the umbilicus, he found some coils of ileum strangulated by a band connecting a Meckel's diverticulum with the umbilicus. This was divided, and after the removal of some fluid found in the cavity, and sponging of the serous membrane, the abdominal wound was closed.

The patient made an uninterrupted recovery. The sutures were removed on August 18th, and on August 30th he was up and about.

His temperature rose to 100.2° the day after the operation, but after that it never rose above 99.2°.

This case is interesting to me in connection with another very simliar case in a boy aged 10½, who came under my care in the London Hospital in 1881, on the third day after the onset of symptoms of strangulation. This boy was operated on shortly after admission, but died a few hours afterwards.

In that case, which is recorded in Vol. 32 of the Transactions of Pathological Society, there was also strangulation of several coils of the ileum by a band connecting a Meckel's diverticulum, which was eighteen inches from the ileocæcal valve and deeply situated, with the umbilicus, but the condition was complicated by the presence of three plum stones

in the ileum just above the diverticulum, where the strangulated portion of the ileum ended. The intestinal coils above the strangulation were distended, and the abdomen was considerably distended by them, and it appeared to me probable that the lower coils of the ileum, having somehow got pushed up behind the band and coming forwards over it, had been *crowded down* into the pelvic region, by distension of the upper part of the intestinal tract resulting from obstruction caused by impaction of a plum stone, and so strangulated.

The history of this case was, that the boy, having complained of some abdominal discomfort the evening before (attributed to disagreement of some cake he had eaten) was seized at three a.m. with severe abdominal pain and vomiting. For two days the pain and vomiting continued severe. On the third day, on which he was brought to the Hospital, they were much less severe, and the mother observed also that the character of the vomited matter was different, having previously been only the milk and other food rejected ; it now had a yellow colour like yolk of eggs.

The boy was in a state of extreme exhaustion, which made Mr. Rivington entertain little hope of relieving him by operation.

I think that the diminution in the severity of the symptoms observed by the mother on the third day, *i.e.* after the symptoms of strangulation had continued for over forty-eight hours, was evidence of the occurrence of a grave failure of the vital powers after that period.

From the facts of the two cases, both occurring in previously healthy lads under very similar conditions, I conclude that in cases of internal strangulation operative interference cannot safely be deferred, in young subjects at least, beyond forty-eight hours from onset of definite symptoms of obstruction ; and that, therefore, in cases where symptoms attributable to, and suggestive of, such strangulations are present, other measures for the relief of the patient, or for the elucidation of the cause of the symptoms, may be continued for that period from their onset, but cannot be continued much longer without gravely prejudicing the expectation of affording relief by operation.

Mr. F. G. Brown related the case of a gentleman who was taken suddenly ill with obstruction, after seventy-two hours of pain and vomiting. Laparotomy was performed by Mr. Clement Lucas. Symptoms continued for three days ; he died on the 11th day. At the autopsy part of the omentum was found adherent in the pelvis and another band higher in the abdomen had kinked the descending colon and so caused obstruction.

Dr. F. J. Smith mentioned three cases already reported and said Dr. Turner's case gave him renewed hope from operation.

Dr. Hingston Fox related a case he had seen in consultation, of acute obstruction in a young woman, in which operation might have been deemed necessary, but abdominal massage, enemata and jactitation were tried thoroughly and conscientiously after Mr. Hutchinson's method, with complete relief in twenty-four hours, and recovery.

Dr. Turner said that the cases were, as a rule, very acute and there was no time for delay.

APRIL 12th, 1893.

MR. OPENSHAW showed two cases of double Genu Valgum. In one there was a separation of the ankles, when the knees were in apposition, of 11 inches. This case was in all respects an ordinary but severe case. In the second case the left leg, in addition to enlargement of the shaft and internal condyle of the femur, presented an enlargement of the upper tibial epiphysis. Osteotomy had already been performed upon the right leg in this patient.

MR. OPENSHAW showed a man upon whom gastrostomy had been successfully performed for impermeable stricture of the gullet, some nine weeks ago. The patient had improved considerably in general health and nutrition, having gained three stone in weight. He had now returned to work.

MR. OPENSHAW showed a case of successful resection and reunion of the median nerve at the bend of the elbow, performed three months after its accidental division. There was almost complete return of motion and sensation which had been lost over an area corresponding with the distribution of the median nerve in the right hand.

DR. F. J. SMITH showed a lad aged 20 with typical congenital syphilitic teeth.

MYXŒDEMA TREATED BY THYROID EXTRACT.

Case shown by Mr. J. F. Woods.

J. E., aged 32. Admitted October 30th, 1891. Has been lethargic and reserved ever since admission, and has also heard voices and seen figures.

Myxœdema was diagnosed on January 15th, 1893. She then had a puffy œdematous condition about the eyes, face, and neck, the face was expressionless, the hair scanty and coarse; she was anæmic, and the skin all over the body was dry and branny. Her mental processes were slow, and her speech slow and delivered in a monotone. The heart and lungs were normal. The urine was normal, containing

neither albumen nor sugar. There was no œdema about the ankles, nor spade-like condition of the hands.

Treatment was commenced on January 20th. She then had four or five hypodermic injections of Brady and Martin's thyroid extract, but a week later this treatment was changed for White's (of St. Thomas') thyroid powder, which was given twice a week. This treatment was continued until last week, when a thyroid mixture was given, as the patient took a dislike to powders. Three days after commencing treatment improvement began. She became brighter, and began to walk about and talk with others, whereas she used formerly to sit gazing in the fire. The œdema of the face began to disappear, and the face to have more expression. This improvement has continued, but it has been less rapid of late.

There is not much change in her hallucinations of hearing and seeing.

On January 27th	the	weight	was	9 stone	$6\frac{1}{2}$ lbs.
On February 10th	-	-	-	8 stone	$13\frac{1}{2}$ lbs.
On April 6th	-	-	-	8 stone	$12\frac{1}{2}$ lbs.

MYXŒDEMA, APPARENTLY CURED BY TREATMENT WITH CRUDE THYROID GLANDS.

Case exhibited by Dr. Hingston Fox.

Eliza H., aged 42 years, suffered from symptoms of Myxœdema of recent origin, and was shown before the Society on 23rd November last, prior to commencing treatment (see Transactions, 1892-3, p. 93). She had since been treated with sheep's Thyroid Glands, one weekly, which she was instructed to eat, half at a time, at two days interval, either raw between bread and butter, or slightly fried. In all she had taken about eleven glands. The result was apparent within a month, and she had steadily improved, and had now lost her myxœdematous signs. The weight (clothed) had diminished in four and a half months from $143\frac{3}{4}$ lbs. to $124\frac{1}{2}$ lbs., a loss of $19\frac{1}{4}$ lbs., the height being 5 ft. $3\frac{3}{4}$ in. Her hands had become smaller, and she had

shrunk in all respects, excepting that the exophthalmos was unaltered, this being usually a symptom which once established by any cause is permanent. The skin was no longer dry, harsh, or yellowish in hue: she now often perspired: desquamation had taken place to a marked extent on the hands, and also on the feet and legs. The catamenia were no longer profuse, and the bowels had become less costive: taste had also returned. Not only had the physical condition altered, but mentally the change was also great. She felt much lighter, less burdened, as she said, and the depression of spirits had largely passed away.

Probably in this case a smaller quantity than the one thyroid gland per week would have sufficed to produce a cure. The rapidity of its action may perhaps be greater because the disease had not advanced so far as in some other cases, and she was also younger in age. There seemed to have been no inconveniences attaching to the treatment, excepting the distaste—which was soon overcome—for the glands as articles of food.*

The notes of another case of Myxœdema cured by eating crude thyroids were read by Dr. F. J. Smith.

An interesting point in the course of this case was that as a result of the accidental administration of ten thyroids an attack of acute eczema with nausea and extremely rapid pulse resulted.

Dr. Davies said that in many of the cases he had treated he had noticed desquamation and erythema as the result of the exhibition of Thyroid Extract.

A case of Bell's facial paralysis was exhibited by Dr. Davies.

A case of hemifacial diaphoresis was shown by Dr. Davies.

Dr. Milne Bramwell said he had treated a similar case successfully by hypnotism and suggestion, the notes of which were as follows :—

Miss D., aged 19, first consulted me in January, 1890, on account of excessive local perspiration. This was confined to a patch on the back

* This case underwent some relapse after stoppage of treatment.

of one forearm, well defined, three inches long and two wide. The perspiration was excessive, constant, and had existed without interruption from early childhood. Exertion and emotion aggravated the condition, and frequently the bandages with which she surrounded the affected part would be soaked through, and the perspiration would drip on the floor.

I succeeded in hypnotising her almost instantaneously, and suggested the cessation of the secretion. On the following day I found marked improvement, re-hypnotised her and repeated the suggestions. After the second suggestion the affected portion of skin became perfectly normal, and when I last saw her in November, 1892, there had been no relapse.

The patient at the time of first consulting me wished to become a dressmaker, but this her malady rendered impossible, as she soiled any work she touched. Her cure had enabled her to follow the employment of her choice.

LYMPHADENOMA.

Case exhibited by Dr. Hingston Fox.

N.D., a stunted girl aged 18 years, looking two years younger; had never menstruated. She came complaining of tumour in the neck, of six months' growth, and had had pains and swelling of the abdomen three years ago. Her father died at 38 years of complicated disorders, cough, etc. (probably phthisis); his sisters were consumptive. She had a large mass occupying the left side of the neck, behind and about the left angle of the jaw; consisting of a collection of enlarged glands, apparently including the parotid and submaxillary glands. The glands in other parts of the neck, in the axillæ, groins, etc., were also enlarged and hard, and the spleen and liver were both somewhat increased in size. The lower half of the abdomen was prominent, tense and ill-resonant, but no lumps could be made out. The blood appeared normal under the microscope. The urine was concentrated and contained albumen to the extent of a thin cloud on boiling.

This appeared to be a case of lymphadenoma of the type closely allied to struma, although the mass of glands was not so uniformly hard as it often is in scrofulous glands; the softish masses of the separate glands could be readily felt. On the other hand it was very unlike the leukæmic

type of lymphadenoma, where the spleen is much enlarged and the blood is affected. There seem to be all gradations between these types. Is there a definite connection between this type of the disease and scrofula?

Therapeutically there seems to be no certain remedy. Arsenic had been tried in this case for three weeks, increasing from five to eight minims, three times a day; besides malt extract and general anti-scrofulous remedies. But treatment was imperfectly carried out, owing to the girl's obstinacy.

Records showed some instances of apparent cure by the use of arsenic, but these were quite exceptional.

MR. OPENSHAW said he thought that surgical interference in this case was inadvisable.

ALCOHOLISM CURED BY HYPNOTISM AND SUGGESTION.

Case exhibited by Mr. J. F. Woods.

H.A., male, age 47, a painter, and formerly in the army. Admitted April 3rd, 1891, suffering from mania. Hears voices accusing him of having starved his child, and they prevent him from getting work; wishes he was dead, etc. Cause: Drink.

Has been in several asylums and got well enough to go out. At times behaves fairly well and works about the garden. Is very fond of drink, but wishes to be cured, and has taken the pledge seven times since he has been here. Gets very excited and quarrelsome after he has been out, and always spends the greater part of his pocket-money in drink.

He was hypnotised on March 27th for the first time, by the mirrors, and was told that he could not take any drink, and that if he did it would make him sick at once.

March 31st—Again hypnotised and suggestion repeated.

April 4th—Again hypnotised and suggestion repeated.

April 5th—Again hypnotised and suggestion repeated.

April 7th—Again hypnotised and suggestion repeated.

Has taken no drink since he was first hypnotised, although tempted on various occasions. £2 was offered him if he would drink a glass of whisky and water, but he refused, and said that he could not and would not try.

MR. WOODS exhibited the revolving mirrors, by means of which he has frequently hypnotised patients. The patient himself was present and stated his case.

MR. WOODS exhibited a female patient who had been an alcoholic for eight years, and who had been cured by hypnotic suggestion under his care. The patient was hypnotised by Mr. Woods, and was ordered to wake up in half a minute : she did so in twelve seconds. Her history was as follows :—

A. B., female, married, age 29 years. Eight years ago began taking stimulants (chiefly brandy) for the slightest ailment, or if upset ; she has been taking considerably more alcohol during the last two years.

First put under treatment (not hypnotic) four years ago, without success, and was put into a retreat last year, from which she escaped after two months' residence. She has been prescribed for by various medical men, and has taken a good deal of medicine.

She saw Dr. Tuckey for the first time in December last, and was hypnotised in January with the suggestion that " she could not take any kind of stimulant, and if she did it would make her very ill." This treatment was successful as regards alcohol, but if upset she would take drugs, such as Ether, Laudanum, etc. She was sent by Dr. Tuckey to Mr. Woods as a voluntary boarder, and for the last five weeks had been frequently hypnotised, and had taken his suggestions. Since the first week she had been always bright and cheerful. She now has no desire for any drink or drugs, and although she has been out alone, and could go out whenever she liked, she said that she felt disgusted when she thought of what she had taken.

She was now only staying at the Asylum until her husband came home from Africa, as she did not require further treatment.

MR. WOODS next exhibited a female patient who had suffered from severe facial neuralgia for four years, no medicine giving relief for more than four days together. She had been completely cured by hypnotic suggestion.

The notes of her case were as follows :—

A. L. W., female, single, age 24 years. Suffering from Facial Neuralgia for four years. No medicine relieved her for more than a few days. She could not sleep, and was weak and generally depressed.

Hypnotised for the first time about October 9th, and the suggestion given that " She was to sleep for fifteen minutes, and that when she awoke all her pain would be gone, and that she would be bright and cheerful, and would sleep well every night." Everything, greatly to Mr. Woods' surprise (this being one of his first cases), happened as suggested. The patient awoke laughing, had no pain, and slept well every night, the neuralgia not returning until twelve days afterwards, when she was again hypnotised, and has not had neuralgia again (that is since October 21st or 22nd, nearly six months), and she has remained bright and cheerful ever since.

Mr. Woods next hypnotised the first patient, and several of the Fellows present endeavoured to awake him, and to bend limbs ordered to be held rigid, but were unable to do so.

Dr. Lloyd Tuckey, in discussing these cases, said that the second case had been under his care, and although partially reformed by hypnotism, had twice relapsed.

Dr. Milne Bramwell said he had seen similar cases. He mentioned the case of a man who was for seventeen years a drunkard, and who had been twice under restraint; he was hypnotised, remained well for five weeks, relapsed for a week, was rehypnotised and never again relapsed; this was three years ago. Another case, a working man, drunkard, treated by hypnotic suggestion twice, and had been absolutely temperate since. Another case, a drunkard, acquired the chloral and sulphonal habit, was supposed to be suffering from locomotor ataxia, but was cured by hypnotic suggestion. He had also known neuralgia and insomnia cured by suggestion. He admitted that in unscrupulous hands it might be a dangerous remedy, but so were morphia, chloroform, and every poison. He mentioned that several French specialists had hypnotised thousands of patients without any evil effects. In his own practice he always made the following suggestions during hypnosis to each patient. (1) Without the consent of both of us no one shall be able to hypnotise you except myself. (2) I shall never be able to rehypnotise you without your express consent. (3) No suggestions shall take effect except those to which you have agreed in the normal state. He illustrated this by relating the case of a girl, whom he could not himself hypnotise a second time, because the patient had meanwhile been persuaded not to allow him to hypnotise her.

Dr. Glover Lyon wished to know whether alcoholics could be cured against their will. He thought that patients were frequently cured if they willed it. He was unconvinced by anything that he had seen to-night. For himself he accepted the advice given him by Dr. Ord, viz.: to let hypnotism severely alone, unless in very exceptional cases, its use being dangerous to physician and patient alike.

Dr. Hingston Fox had no personal experience of hypnotism, but thought with Dr. Lyon that the method was very open to criticism. It seemed that a species of Mental Ataxia was produced by hypnotism, and it was a serious question what the permanent effect of this would be on the patient. At the same time, where the disease was very grave, and a cure had by this means resulted, Dr. Fox would not carp at a mode of treatment which succeeded when all else had failed.

APRIL 25th, 1893.

MELANOTIC SARCOMA OF THE AURICLE.

Specimen shown by Dr. Stowers.

Dr. Stowers read the notes and exhibited sections and plates of a case of melanotic sarcoma of the left auricle of a girl, Charlotte H., aged 11 years, seen first by him on 27th Oct., 1892. The growth had been first noticed in April. When seen the fossa of the helix presented a slightly uneven and verrucous condition, of a dark slate colour, suggestive almost of artificial staining. No cell growth could be seen on the posterior surface, but when the pinna was turned forward a slight darkening of the skin appeared, evidently connected with and of the same character as the disease on the enterior part. The remainder of the left ear and the whole of the right were normal. No moles or pigmentary nævi existed about the face or elsewhere, and the disease was not observed to have been connected with any such growths previously existing. The child suffered no pain or inconvenience in the part, and was unconscious of its existence until it was discovered by her parents. The patient, though tall and well grown for her age, was somewhat thin and anæmic, but of very intelligent disposition. The family history was good, three of her grand parents died aged 78, 79, and 82 years respectively. One sister living aged 10 years, and in good health. One brother died of infantile diarrhœa, aged 4 months. Acid nitrate of mercury had been ineffectually applied. Dr. Stowers had made vain attempts to destroy it by electrolysis and later by erasion and the free use of nitrate of silver under chloroform, but despite the endeavours the growth still increased. A small piece was scooped out and microscopic examination made of it, and conclusive proof was then obtained of the malignancy. It was an exceedingly rare case. The parents refused any operation. The section showed spindle cells, many containing pigment, between which was intercellular substance. There was a marked tendency to the formation of alveoli, and cell nests were present as usually found in rapid growths.

(The upper half of the ear has since been removed by Dr. Stowers, and up to September 14th, 1894, no recurrence of the disease had taken place.)

ON THE LOGICAL CONSEQUENCES OF THE BACILLARY THEORY OF CONSUMPTION.

By Dr. Arnold Chaplin.

I venture to submit this paper to the members of the Hunterian Society more on account of its possible practical bearings than on account of any fresh originality it may possess.

The history of the work done in the field of tuberculosis during the last twelve years might with propriety be briefly described as a struggle for the ascendancy of the tubercle bacillus. As the result of this, perhaps, it is not too much to say that the bacillus is installed as the *vera causa* of tuberculosis, whilst other factors in the disease, formerly looked upon as highly important, are either relegated to oblivion ; or are only given a secondary prominence. In order to follow the more easily this paper I may perhaps be permitted to recount the chief facts upon which the bacillary theory of tuberculosis rests.

First of all it is generally believed that in all cases of true tuberculosis, whether of the lungs or any other part of the body, there exists a specific micro-organism not found in association with any other disease, which has been designated the bacillus tuberculosis. Secondly, it is generally accepted that when discharges, whether of sputum or of pus, from a tuberculous surface are injected into an animal, the result is, within a varying time of from three weeks to four months, an infection of tubercle, in which by appropriate means there can be demonstrated the tubercle bacillus. And further we know that a pure cultivation of these bacilli can be obtained, which, when injected into an animal, will produce the same result, viz., tuberculosis. Thirdly, we are also asked by Cornet and others to believe that dust taken from

apartments, habitations, and localities in which people with tuberculosis have dwelt contains this organism, and is capable, when injected into an animal, of giving rise to tuberculosis. Lastly, some have advanced weighty reasons why we should believe that tuberculosis, in some instances at least, is directly contagious.

From these facts, if they are true, the following deductions are fairly permissible :—1. That tuberculosis is a disease due to a specific organism. 2. That this organism when cast upon suitable soil will produce tuberculosis and only tuberculosis. And (3) that every case of tuberculosis must have had its origin directly or indirectly in another case. This is nothing more than subscribing to the view that tuberculosis is a specific infective disease, in the same class as typhoid fever for example, and other allied affections. This being so it is quite fair, I think, to regard it as a disease requiring to be put under the same conditions for its arrest as any other infective disease, for instance, typhoid fever. For methods of parallel I choose typhoid fever, since there is a close similarity between it and tuberculosis. The dangerous and potentially infective part of typhoid fever is the discharge coming from the ulcer in the intestine. The dangerous part of tuberculosis is also the discharge coming from the ulcerating tuberculous surface wherever situated. My point then is this, that if we believe and accept these facts we must not be afraid to push them to their logical conclusions. From this belief arise logical consequences which we must be prepared to take along with it. The logical consequences of these premises are that, granting these facts concerning the infectivity of tuberculosis, we must deal with it in precisely the same way as we should deal with any other similar specific infective disease ; we must disinfect the discharges from the tuberculous surfaces, do all in our power to render danger to others an impossibility, and, if necessary, adopt some method of isolation.

I propose then, first, to enquire with what degree of completeness the principles of the belief in this subject are carried out, and, secondly, to discuss by what means a more

efficient scheme for the prevention of tuberculosis can be initiated and, possibly, carried out.

Of late, owing to the unremitting labours of Koch and those associated with him, great attention has been paid to the treatment of tuberculosis, or more particularly of lung tuberculosis, by means of bacillicide remedies. Time will not permit an exact and exhaustive criticism of these remedies ; suffice it to say that there are some who believe that this class of remedy does accomplish some benefit, and that even if this be not granted, holding, as I must assume we do, the main points of the belief, it must yet be looked upon as a base line from which more extended operations in the same direction may proceed. These antiseptic therapeutics of tuberculosis may be regarded as an attack upon the bacillus entrenched, and all honour to those who may by these means be successful in dislodging it ; indeed, sanguine of success must they be who have the hardihood to attempt it. But looking at the question of the cure or arrest of tuberculosis in its broadest aspects, the question may well be asked—does it really benefit the community at large ? The individual is undoubtedly benefited, he is patched up or cured, and is enabled to pursue his vocation without let or hindrance. He is placed in a position to transmit either the tendency to the disease, or the disease itself ; on the one hand by begetting offspring who stand a chance of becoming tuberculous, on the other, by ejecting discharges from his tuberculous surfaces which contain the germ of this disease. For these reasons the idea of attempting to treat the disease as it appears in the individual, without paying any attention to the destruction of the discharge from his tuberculous surfaces, can be of no real practical advantage. However much we improve his condition, his is the power always to disseminate his disease, and we can never say when he may be regarded as totally free from all tubercular taint. Trying to combat tuberculosis in this way seems to find an apt parallel in the attempt to empty a cistern by a half-inch pipe while it is being filled at the same time by a six inch one. So, although the treat-

ment of actual tuberculosis alone will not be of much avail, yet this, in conjunction with a determined attempt to disinfect all tuberculous discharges would be the one method of all most likely to succeed, and diminish the amount of tuberculosis in the world.

Granting that there is a wide-spread effort to cure tuberculosis in the individual by various means, let us see what is the attitude of the Medical Profession towards the proposal for disinfecting and destroying all tuberculous discharges. First, as to the special Chest Hospitals. In the four London hospitals devoted to the treatment of diseases of the chest, there exists a regular system of disinfection of the expectoration of the patients admitted. I am not conversant with the exact method employed in all these hospitals, but in the one to which I am attached every bed is provided with an earthenware spittoon, in which is placed a few ounces of carbolic acid, of strength 1 in 20, or Perchloride of Mercury, 1 in 500, and the practice of spitting only into this receptacle is rigidly enforced. On entering the hospital patients are given a printed notice, on which is written: "Patients with cough and expectoration must make use of the disinfecting spittoons. The practice of spitting on the floor or into a handkerchief is strictly prohibited." The nursing staff is enjoined to take great pains to explain the reason for all this, to point out that the expectoration contains something dangerous, something which is capable of spreading the disease. Any patient found spitting on the floor or into a handkerchief is liable to instant dismissal. Spittoons are also placed all over the wards and corridors. In the out-patient department, by means of notices and constant admonitions, the same principles are enforced. The observance of these regulations is of more far-reaching importance than the mere disinfection of tuberculous discharges when in the hospital; for it is repeatedly found that when patients are again admitted into the hospital they have, while at home, harkened unto all that has been said, and have lived their lives, out of the hospital, in accordance with the precepts laid down. The practice of receiving into

carbolic the dejecta of patients with tuberculosis has not, so far as I am aware, yet become general in the hospital.

My colleague, Dr. Heron, to whom the greater part of this plan of procedure is due, has gone yet a step further, and in his wards, insists that patients shall place their handkerchiefs, after using them, in a wire cage, which is attached to the beds. These cages are cleansed regularly in carbolic. The object of this arrangement is very important, for it can frequently be observed that patients after a fit of coughing and spitting, wipe their lips, all contaminated with sputum as they are, on the handkerchief, and then place that article under the pillow. The small quantity of expectoration on the handkerchief rapidly drys up, and there is nothing to prevent the pillow cases and sheets from becoming impregnated with dangerous dust, whereas if the handkerchief is placed in a wire cage and there kept until it is required, the chances of its infecting other linen and clothes are much minimised. All this is only what should be expected from hospitals claiming to devote their attention entirely to the treatment of chest disease. By so doing they not only become centres for the treatment of certain diseases, but schools of instruction, the good influences of which are gradually, but surely, shed around. In fine, viewed in this light, the Chest Hospitals bear the same relation to Phthisis that the medical teaching schools bear to the medical profession, or the military training academy does to the army. But however perfect the methods of disinfection may be inside the Hospital, however much impressed with the importance of the regulations the patients may be, and however faithfully they may carry out the regulations when at home, it is in the out-patient department that one finds the greatest difficulty in driving home these truths. Here several things militate against an exact insistence upon these regulations. There is not time to take each out-patient separately, and faithfully advise him as to his mode of life. And again, in many cases he is not so ill as the in-patient; in many instances he is able to pursue his work, and very often work uncongenial to any idea of rendering himself free from

infection. Indeed, it cannot be expected that all patients attending a Chest Hospital will listen to the request not to expectorate in the street, or on the floor of a railway carriage, or tramcar, however strongly we emphasize it. There is an example of this carelessness but a few steps from here. Outside the Great Eastern Terminus every day a man can be seen who sells papers; he has been under my care at the Victoria Park Chest Hospital, and has Phthisis well advanced of the left lung. In spite of all remonstrance he continues to expectorate phlegm, which is copious and teeming with bacilli, into the street; and there was until recently a man following the same occupation, and pursuing the same vicious practice at Chancery Lane. Again, the out-patients journeying to and from the Victoria Park Hospital make large use of the tramcars running in the vicinity of the Hospital; it is no exaggeration to say that these patients may be seen daily expectorating on to the floors of these vehicles; and I suspect the same tale could be told of the tramcars running up the City Road, and omnibusses running up Brompton Road. These are only isolated instances among thousands. The proceedings of these patients excite no feeling of alarm, and yet, if we accept our creed, such a practice is of the most fearful importance. Some little while back London was possessed of unreasoning fear, when it was alleged that a leprous butcher was pursuing his vocation in the Smithfield Meat Market, while few cared how much tuberculous meat was being distributed throughout the land, or how much the tuberculous individual was permitted to eject his discharges wheresoever he listed. So if this represents the average out-patient of the chest department, complete success cannot be said at present to crown the efforts of those who attempt to grapple with this important question. I submit that much difficulty would be obviated, and much useful instruction given to the out-patients, if each one were provided with a printed leaflet containing in plain terms what he should do to avoid exposing his friends and others, to the chance of becoming infected with his disease.

Let us next enquire how the general hospital carries out

the consequences of the belief that tuberculosis is due to the tubercle bacillus. Here, in addition to lung tuberculosis, all other kinds including all the surgical forms of the disease are treated. I cannot base my statement on anything better than what information I have been able to gather from conversation and from limited personal observation, but I ask, is there an organised attempt to render harmless the discharges from these patients? Do the spittoons contain antiseptic solutions? and does the sputum, some of it, become quickly dry? Is a case of intestinal tuberculosis lying side by side with a case of typhoid subject to a widely different regime? Are the stools of the patient with tuberculosis received into carbolic in the general hospital any more than they are in the chest hospital? Is the practice of advising patients with tuberculosis not to expectorate anywhere except into a spittoon universally carried out? With reference to the treatment of cases of surgical tuberculosis I will not make any dogmatic statement of any kind, but will content myself with asking these questions, granting that all these cases are treated antiseptically. Is it not possible that a very large quantity of the pus and discharge from these cases which escapes into the dressings, may and does become dry? Is the antiseptic material, of which the dressing is composed, although strong enough to kill ordinary septic micro organisms, yet of sufficient strength to kill the tubercle bacilli which are contained in the pus? and is there any chance of infection arising from this source? Upon these points I can express no opinion, I must ask to be instructed and I have no doubt that there are many here to-night who will be ready to do that for me.

Now let us pass to the methods adopted by medical men in private practice with a view to the disinfection of tuberculous discharges. I suppose prior to 1882 few patients were warned of the danger of allowing their expectoration or discharges to become dry, but now, owing to facts coming to hand as to the nature of tubercle, it is the rule rather than otherwise for patients to be informed exactly how to live so as to become the least possible danger to those around. One

often has evidence of this kind of advice having been tendered to patients, and it is gratifying to observe how carefully they carry out all directions as to disinfection of the expectoration and linen which may have become contaminated.

Lastly, let us turn to the State and see what attitude it presents to this important question. The State has certainly done much towards the diminution of tuberculosis by the great improvement it has made in the general health of the community ; but when we come to enquire what it has done with respect to the recognition of the consequences of this belief, we shall find that there is no record of anything of the kind ever having been done. It has never made any special effort to cope with this immense field of disease, which, if the conclusions set forth at the beginning of this paper be true, is quite specific and, to a certain extent, infective. I do not wish for a moment to under-estimate the great and meritorious work the State has done with reference to general sanitation ; but I do say that this subject of the prevention of tuberculosis has not received sufficient attention from this quarter. So far as I am aware no official instructions to tuberculous individuals have ever yet appeared. It is undoubtedly a glorious work to break up and annihilate such death-spreading pests as epidemics of cholera, small-pox, and scarlet fever, and men may well be content to finish their course after having accomplished that. But let us remember that tuberculosis is still triumphant, and that the mortality from cholera, small-pox, and scarlet-fever is beggarly when compared with tuberculosis, which is said to be answerable for one death out of every five or six.

This, then, is an estimate of what is already being done in England for the prevention of tuberculosis. This is the way in which we carry out the consequences of what we are given to understand is the correct theory of tuberculosis. In no branch of the profession can it be said to be perfect, and in many respects it may well be doubted if the present state of things could be remedied. Let us proceed to enquire as

to how much the system is capable of improvement, and to see if some organised attempt cannot be made which shall have for its aim, and possibly for its result, the diminution or prevention of tuberculosis. The whole subject of the infectiveness of tuberculosis is of little more than ten years' standing, and perhaps this is as far as we could be expected to have advanced in that short period.

But, surely, now that the articles of faith in this subject are clearly enunciated, it is time, if we believe them, to begin to ratify them by carrying out their principles. However that may be, one thing is certain, no definite plan of living will be carried out by people with tuberculosis until the medical profession, whose duty it is to advise them, is agreed as to the principles of the plan. We cannot blame a person with phthisis for spitting into the street when we have never warned him of the possible consequences of such an act. I apprehend that nothing of real importance can be accomplished in the matter of prevention of tuberculosis until people have been educated up to the idea that discharges from tuberculous surfaces are dangerous. This being so (always, of course, with the proviso that we accept the belief) a solemn duty is laid upon us to instruct the patient, his friends, and the nurse, in all matters relating to disinfection. I maintain that any medical man believing this about tuberculosis is in duty bound to place any case of that nature under a strict antiseptic régime. He must advise the disinfection and destruction of the expectoration excreta, and discharges, order all linen, and, indeed, anything likely to be in close proximity to the patient, to be thoroughly sterilised. He must caution his patient against using knives and forks which may be used by others, and the danger arising from kissing must be clearly pointed out. He must advise him clearly against the bad practice of expectorating in the streets, tram cars, railway carriages, and all public places, and if the patient cannot avoid this, he should be advised not to frequent such places. In a word, by the acceptance of this belief, a grave responsibility is thrown upon the medical man, which he cannot in reason

shirk, it becomes his grave duty to acquaint his patient with the fact that he is a pest to those around, that he is capable of giving his fellows his own disease, that he is spreading disease and poison all abroad.

On questions more or less affecting the social happiness of the patient the medical man must tender advice. He must be prepared to point out the fearful responsibility attaching to a man with tuberculosis who takes unto himself a wife. He should gradually educate his patient until marriage with a healthy person would be as foreign to his nature as alliance with a lunatic. After a death has taken place he should advise that all the bedding and the room in which the patient was should be thoroughly disinfected just as though it were a real infectious case. I do not for a moment urge that this is not already being done, for I know that some of it is performed frequently. All I say is that this kind of advice must be always given when a medical man is brought in contact with a tuberculous case, that is, of course, if he believes the opening statements in this paper. After years of constant preaching and continual reiteration these principles will have become established facts, and another generation will have grown up versed in all the preventive methods for tuberculosis. When this has come to pass, then some more definite plan may be considered, but the whole subject is at present so novel that completeness is quite out of the question. This educational system might receive great assistance from another section of the community. It is not too much to say that the battle in which it will be decided whether in years to come tuberculosis shall be on the decrease or not, will be fought out in the slums and crowded districts of our large towns ; and if such is the case the enterprise would receive great help from clergymen, ministers of religion, and mission workers in these districts. In very many instances these workers see cases of tuberculosis before they ever come under the eye of the medical man, and frequently it is on their advice that medical aid is sought. They might, with the greatest advantage to the charge confided to their care, extend the labours of their

mission by advising those whom they may come across to pay attention to the rules which have just been summarized, and I think the goodness of such a work would not come far short of that arising from their other duties.

Of course a complete plan for the prevention of tuberculosis would have to include isolation of the patient so long as his disease lasted, in addition to all the regulations before set forth. At the present time such a scheme is utterly impossible, and it is scarcely probable that it would ever receive consent. Yet it is not altogether outlandish to propose that in time to come it will be fitting to prohibit patients with advanced tuberculosis from travelling in public vehicles, and from frequenting public places, where they would be likely to endanger the health of other people.

But at the present time cannot something be done in this matter? Is it altogether Utopian to ask that every case of tuberculosis shall be placed under the same state regulations as other infectious cases? Could not the word tuberculosis be included in the list of those diseases which come under the Notification Act, without any great strain being thrown on the state authorities? We see scattered over the length and breadth of the land notices and hints as to the avoidance of infection from cholera. Could not the same be done with just as much prospect of success in the case of tuberculosis? What right has a case of lung tuberculosis to go on with his work in a crowded work-room, with scant ventilation, spitting on the floor, and exposing all his fellow workmen to a fearful risk?

The medical profession is powerless in this matter without the co-operation of the public. With their aid the whole treatment of tuberculosis might be revolutionized.

How does it come about that in the whole of London, if we except the workhouse infirmaries, there does not exist an institution to which an advanced case of phthisis can apply with a certainty of admission? Is there not a need for special chest hospitals, under the same state regulations as the fever hospitals, the entire business of which shall be to take in advanced cases of tuberculosis of the lungs, which

cannot be admitted to any other institution, and cannot be treated antiseptically at home? Are 615 beds devoted to the treatment of chest disease sufficient for London with its five and a half million souls?

In conclusion, Sir, if we accept this belief of the origin and spread of tuberculosis, we must be alive also to those consequences which I have endeavoured, with great imperfection I fear, to lay before you.

THE PRESIDENT remarked that if tuberculosis were so contagious, how was it that so few of the workers in chest hospitals become affected?

DR. HERON agreed most heartily with Dr. Chaplin's remarks. He wished to see the general public educated on this matter and thought that Sanitation might well be a subject included in the University Extension Scheme. He would like to see all hospitals for the treatment of consumption removed to the country.

DR. RUFFER agreed with Dr. Chaplin. He maintained that the contagiousness of tubercle had been definitely settled by Koch and others by experiments on animals. He pointed out that Morgagni, two hundred years ago, thought that tubercle was contagious, and that in Italy it had been the habit to isolate these patients. He agreed that it was absolutely necessary to teach the public, and regretted that the medical profession had no central authority, whose duty it was to spread knowledge by disseminating papers on a subject of such vital importance to the community.

DR. DUNDAS GRANT pointed out that it was necessarily difficult to convince the public. He himself could not recall to mind any case in which he was convinced that contagion of tubercle had been direct.

DR. GILBERT could distinctly recall several such cases which had occurred in his practice during the past twenty years.

DR. WM. HUNTER thought that there were men as yet unconvinced that tubercle bacillus was the sole cause of phthisis. He thought that if cases of tubercle were notified like other diseases, maps might then be made and the prevalence of the disease in any one district, street, or even house, could be more easily recognised.

SIR HUGH BEEVOR agreed that the public should be educated, but doubted whether they would be convinced till absolute proof of great risk of contagion was forthcoming.

DR. CHAPLIN, in reply, said he was glad to learn that all agreed that something should be done. In his opinion the rarity of phthisis amongst chest hospital workers was the strongest possible argument in support of sanitation, for in most hospitals devoted to chest disease there was a real attempt to render the chance of infection from sputum remote and impossible. For cases of direct contagion he would refer the Fellows to the appendix to Dr. Heron's book. He agreed with Dr. Hunter that each case should be notified and charted.

OCTOBER 11th, 1894.

THE PRESIDENT, in a few opening remarks, reviewed the progress made by the Society during the past year.

DR. ARMAND RUFFER then delivered the second Hunterian Society Lecture, entitled, "Recent researches on Protozoa, with especial reference to Cancer and Vaccinia."

OCTOBER 25th, 1894.

ON THE TREATMENT OF MYXŒDEMA AND CERTAIN SKIN AFFECTIONS BY THE THYROID EXTRACT.

Paper read by Arthur T. Davies, M.D.

He first dwelt on the different theories, which have been put forward to explain the function of the thyroid gland, and briefly stated them to be as follows :—

(1) That it is for the purpose of preserving the contour of the neck.
(2) That it acts as a mechanical cushion to protect the important vessels and nerves from compression effects exerted by contracting muscles.
(3) That it acts mechanically to support the larynx and improve the voice.
(4) That it acts mechanically and protectively *causes anæmia* of the brain.
(5) That it acts mechanically and protectively *prevents anæmia* of the brain.
(6) That it manufactures some substance specially necessary to the integrity and proper functional activity of the central nervous system.
(7) That it is indirectly a blood-forming organ.
(8) That it is directly a blood-forming organ.
(9) That it plays a special part in the metabolism of the sexual organs.
(10) That it modifies or destroys substances, which, circulating in the blood, are harmful to the general economy, and therefore it secretes some substance useful to the general metabolism of the body.

Of these hypotheses, it will be sufficient to dwell on the last four. Taking them in their order, the sixth hypothesis is chiefly due to Sir John Simon. It does not, however,

follow of necessity that because the nervous symptoms are well marked in myxœdema and cachexia strumipriva, that its function is limited to the nervous system.

The seventh hypothesis has more experimental evidence to support it than any of the preceding. After thyroidectomy there is a marked diminution of the red corpuscles, whilst the white corpuscles are *trebled* in number, and in cachexia thyroidectomica there is always found a remarkable anæmia. Although there is no evidence that the thyroid gland is directly hæmopoietic, yet it is found that the leucocytes are present in greater proportion in the thyroidal vein than in the thyroidal artery.

The eight hypothesis is supported by strong evidence which points to the indirect hæmopoietic action of the gland. After the removal of the thyroid gland the condition of the blood is found to be greatly altered apart from the corpuscular changes. Thus there is—*(a)* Increased venosity ; *(b)* Great diminution of oxygen in the arterial blood, so that it may fall below the normal standard in the vein (anoxyæmia) ; *(c)* Presence of mucin.

The ninth hypothesis connecting the functions of the thyroid gland with those of the female sexual organs is one of considerable antiquity, and is no doubt due to the fact of the enlargement of the gland in menstruation and pregnancy. It may be noted in passing that the maxima for the appearance of goitre are the development of puberty and senile involution.

The tenth hypothesis, which is far the most important, is now firmly based on direct experimental and clinical observation ; we now know that the thyroid gland plays an important part in metabolism, which, however, is widely different in different animals and depends apparently entirely on the nature of the food on which the animal is fed ; thus it is shewn by Victor Horsley that in birds and rodents no effect is produced after thyroidectomy. The first attempt to make a direct therapeutic use of the thyroid gland was that of Prof. Kocher, in 1883, who transplanted in cases of cachexia strumipriva or operative myxœdema, a small por-

tion of the gland freshly excised from a goitre, but the piece so transplanted was soon absorbed. In 1889, he again took up the subject by putting the gland *loose* in the abdominal cavity with marked benefit to a patient who had myxœdema. Dr. Von Esselberg had previously shown that if the thyroid gland was successfully transplanted from the neck of an animal to some other part of the body, it was capable of continuing its functions and of preventing the onset of symptoms. The most important work however, which has contributed more than any other to the therapeutic value of the thyroid gland is that of Victor Horsley. He removed the thyroid gland in monkeys and succeeded in producing all the symptoms of myxœdema and cachexia strumipriva ; further, he showed that, simply by the application of heat, he could change the symptoms into those of chronic myxœdema or cretinism. As a result of these experiments, Horsley suggested the grafting of a healthy sheep's thyroid gland as a means of arresting the disease, which idea was carried out by Bettencourt and Serrano of Lisbon, and Mr. Hurry Fenwick and Dr. Collins in England. Marked benefit resulted in each case, and as the improvement occurred immediately on the day after the operation, it was considered that this result must be due to the absorption of the juice of the healthy gland by the patient's tissues. In 1890 and 1891, G. Vassale and E. Gley tried the effect of injections of thyroid juice into animals, and they found that the symptoms which had been produced by thyroidectomy were removed by injections of the thyroid juice. Brown-Sequard and D'Arsonval, in 1891, suggested that *injection* of thyroid juice would do good in myxœdema. Previously to this, however, Dr. Geo. Murray, of Newcastle, tried the effects of injecting an extract of the thyroid gland of a sheep in a well marked case of myxœdema with brilliant results. The extract consisted of equal parts of thyroid extract, glycerine, and a half per cent. solution of carbolic acid, of which he injects ten to fifteen minims twice a week ; (ninety minims is equivalent to the complete thyroid gland). When the symptoms have subsided, he

advises the injection of fifteen minims once a week ; this he finds is sufficient to keep the patient in health. Over doses have caused sometimes alarming symptoms, which are as follows :—(1) Loss of consciousness ; (2) nausea ; (3) tendency to syncope ; (4) tonic spasms ; (5) abscesses and induration ; (6) rapid pulse. I now shew this patient, G.W., who has been under my care nine years. He formerly presented the most typical features of the disease in every respect. He is 38, married, three children, baker by trade, always temperate, previous and family history nil. In 1879, his friends noticed the swelling of face, and he noticed that his gait was unsteady, he was always chilly, tongue enlarged, teeth loose, gums spongy, hair falling out, aspect stolid, skin of forehead thickened, and of a yellowish pigmentation, with almost complete obliteration of wrinkles ; eyebrows leonine, and eyelashes thin, eyelids puffy and pearly in aspect, the root of the nose broad, the cheeks puffy and full, and presented a delicate pink porcelain-like flush ; lips thick, and the lower one of a purplish hue ; voice monotonous and articulation slow, thyroid not felt, the hands clumsy and expressionless, the skin dry and scaly, urine 1016, no albumen, urea=1·1 per cent., temperature subnormal ; there was a marked tendency to hæmorrhage.

In October, 1891, the patient became much worse, and was admitted into the Hackney Infirmary, and in December, 1891, at my suggestion, Dr. Gordon kindly gave me permission to try the subcutaneous injection of the thyroid extract. This treatment was carried on by Dr. Oliver, to whom I am specially indebted for giving me full details of the case from time to time. The result was remarkable. Improvement commenced at once : the œdema disguising the facial features melted away, and the hands regained their natural size ; the hair has grown again, and the skin become supple and moist ; the temperature has become normal ; there has been a decided loss of weight. Concurrently with the vast improvement in the physical state, there has been great *mental* improvement, so that the man

is much more active both mentally and physically. The treatment in this case has now been carried on for two and a half years. When it has been given up, it is found that after about six weeks the patient relapses.

In October, 1892, Dr. Hector Mackenzie published the account of a patient treated by what may be considered a distinct advance on this treatment. He found that he could obtain equally good results by giving the *fresh* thyroid gland by the mouth. He first administered two glands at a time, and he gave also a glycerine extract of the glands. These amounts, however, he found were too great, as shown by the marked rise of temperature, and rapid pulse, and the tendency to nausea. Dr. E. L. Fox quite independently arrived at the same results.

On the continent, Dr. Howitz, of Copenhagen, made use of pies of calf's thyroid, the glands having been carefully boiled, minced, and seasoned in various ways together with the water in which they had been boiled. There was decided improvement in three days, and a loss of weight took place amounting to two stone. There was extensive desquamation of the hands, and the temperature became normal. This patient was seized with occasional attacks of angina pectoris with rapid weak pulse, necessitating the stoppage of treatment. In November, 1892, Dr. Hector Mackenzie suggested to me the use of a *dried* thyroid extract prepared by Mr. E. White, of St. Thomas' Hospital, which I found to be equally efficacious with the other form of the remedy. This case which I now show you has been treated in this manner. Joseph M., age 45. The duration of the disease has been six years. With other physical changes characteristic of myxœdema, he specially noted the loss of the hair from the body generally, he also complained of vertigo, increased dislike to crowds and noise, and occasional inco-ordination of the legs. The patient presented the typical aspect of myxœdema. In December, 1892, I put him on White's thyroid powders at first every other day and then each day. There has been a steady improvement. The œdema masking the face has disappeared, the skin has become moist and

natural, together with a sensation of warmth throughout the body, the hair is growing on the body generally, the weight fell from 149 to 134 lbs., a loss of 15 lbs. in 18 weeks ; he is much more active and has quite lost all his former subjective symptoms, showing to what extent the bodily bulk was lessened after treatment, the patient has been obliged to take in his truss by five holes. When the powders had been discontinued for six or seven weeks, the patient relapsed into his former state, but again recovered when put on them again. There was very marked desquamation of the hands and feet. It is noteworthy that the man suffered so much from cold that he was obliged to wear a great coat in *summer* time, now he enjoys the coldest weather. I have now treated six cases with the dried thyroid extract, and in each there has been a similar marked improvement. To sum up the effects of this treatment :—

(1) There is a gradual rise of the temperature to normal, and with this the patient experiences a sensation of warmth.

(2) There is a loss of weight, which in some of my cases was very marked, one patient having lost 56lbs. in fifteen weeks. With this reduction in bodily bulk clothes have to be taken in and smaller gloves and boots worn.

(3) There is a disappearance of the œdematous condition, and with this as it were an unmasking of the features, the lemon tinted aspect and high flush disappear, and also the leonine aspect.

(4) The skin becomes more supple and moist, and there is often marked desquamation of the hands and feet, so that the skin peels off sometimes in large flakes ; the corns are also shed.

(5) The hair on the vertex and eyebrows grows again, but it is noted that there is sometimes falling out of the old hair prior to growth of the new.

(6) There is often great improvement in the hearing. This was especially marked in one of my cases.

(7) The speech becomes easier and more rapid, due in part to the decrease in the size of the tongue, and in part to the disappearance of the œdema of mucous membrane of mouth and larynx.

(8) The teeth become firmer, and the gums lose their spongy condition.

(9) The patient resumes his former activity, both bodily and mental, and in cases of insanity there is a return to the normal mental condition.

There has been an obvious extension of this treatment to cases of sporadic cretinism, and most remarkable results have been obtained. In these cases the *growth* has been extraordinary ; thus Dr. Byrom Bramwell showed two cases at the Edinburgh Medico-Chirurgical Society, in one of which the patient, five years old, grew one and a quarter inches in seven weeks ; in another, a boy of eighteen, the growth had been two inches in nine weeks ; in addition to this there was marked mental improvement. Dr. John Thomson has also published similarly remarkable cases.

There has also been a still further development of the thyroid treatment. Struck by the remarkable desquamation in some cases of myxœdema after this treatment Dr. Byrom Bramwell tried the effect of giving the remedy in a case of psoriasis. The result was very satisfactory. Having seen this case I tried giving the thyroid extract to two cases of psoriasis, one of icthyosis and one of chronic eczema. The first case of psoriasis was cured in seven weeks, and the patient said he felt much more active. The second case was of three years' duration. Here the remedy effected practically a cure in three months, given in small doses. In the icthyosis case a very great improvement has taken place after a prolonged treatment of several months. There is a marked hereditary history of xerodermia in this patient's family. In the case of chronic eczema there was a very decided improvement, but the remedy caused a very irregular and weak condition of the heart. The last three cases showed a tendency to relapse after the drug had been discontinued for some time, but again improved under treatment. In these cases it was remarkable how the diseased skin fell off and was replaced gradually by new tissue. During the thyroid treatment no *local* application was used.

Dr. Davies also showed a series of extracts of animal fluids.

The President expressed surprise that it seemed to make no difference in what form the Thyroid Gland was exhibited.

Dr. Hector Mackenzie said the patient which had been alluded to by Dr. Davies was now in good health. He thought that the deaths which had occurred were due to incautious administration. He had

noticed marked benefit in the uterine trouble, e. g. Menorrhagia, as the myxœdema disappeared, the uterine trouble disappeared also. He had tried to cure baldness with no result. In cases of obesity no effect was produced. In abnormal dryness of skin, xerodermia, there was no increased action of skin. In psoriasis it was interesting that effects so remarkable have resulted.

Dr. Fletcher Beach mentioned that myxœdema occurred more often in females, and this was also the case in sporadic cretinism. In his cases, however, seven were males and three females. The Tabellæ Thyroidin (Allen and Hanbury) contained a quarter of a Thyroid Gland. He enunciated the theory that the thyroid seemed to pour some unknown substance into the blood, which was necessary for the nutrition of the brain and other tissues.

Dr. Pasteur emphasized the necessity for care in the administration He had observed prolonged syncope and rapid action of heart follow the administration of even moderate doses. As illustrating the powerful action of the remedy, he quoted a case of long standing in which nine doses sufficed to remove all visible evidence of myxœdema ; on the other hand in the case of a nurse who was treated in an early stage of the disease, a single tabloid per week sufficed to maintain perfect health. He strongly urged the continued administration of thyroid extract (preferably in the form of tabloids), as he believed that the method of treatment under discussion did nothing more than supply the patient by the mouth with an active substance, which in health should be manufactured in his body, and without which the maintenance of health was not possible.

Dr. Balmanno Squire was especially interested in hearing of its effect in psoriasis cases.

Dr. Tyson (Folkestone) enumerated cases of psoriasis (2) and eczema (1) in which benefit had been derived. He gave tabloids, and he suggested that there might be many other diseases which might be benefited by Thyroid extract.

Dr. Tregelles Fox mentioned two cases of myxœdema which had been benefited at Strathpeffer by a course of sulphur baths and waters, and thought that as yet there was no proof that other treatment was ineffectual in curing myxœdema.

Dr. Hingston Fox suggested that as the Thyroid Gland in women varied in size, etc., with menstruation and other conditions, might not the thyroid gland taken from an animal vary in therapeutical power according to the condition of the animal when killed. This might explain some of the apparent failures, and variation in results.

Dr. Davies replied.

NOVEMBER 8th, 1893.—Clinical Evening.

CONGENITAL MALFORMATION OF THE HEART.

Case shown by Dr. Chaplin.

A boy, aged 10 years, complained of constant shortness of breath, cough, and sensitiveness to cold. His mother stated that he had been ailing ever since he was six weeks old.

On examination the patient was undergrown, his extremities were cold and blue, especially the nose and fingers. The lips were deeply cyanosed, and the fingers much clubbed. The heart was enlarged, the impulse forcible, and the beat 120 per minute ; at the apex and down the sternum there was a rough, short systolic murmur to be heard ; over the Pulmonary artery no murmur could be detected.

Dr. Chaplin suggested that this case of Congenital Heart Disease probably consisted of an imperfection of the septum between the auricles or ventricle, together with narrowing or obliteration of the pulmonary artery. He thought the narrowing of the pulmonary artery must be extreme, or there might be even obliteration of that vessel, and based this view on the fact of there being no pulmonary murmur.

He had had under observation ten of these cases and most of them developed tuberculosis sooner or later. Where there was no evidence of patent septum, and simply stenosis of the pulmonary artery, the prognosis seemed to be much better. He suggested removal to a warm climate as the best way of treating these cases.

Dr. F. J. Smith thought there was a communication between the two auricles rather than between the ventricles, on account of the fact of the localisation of the murmur. He could hear no murmur at the apex.

Dr. Hadley suggested that there was only one ventricle. This he thought probable from the character of the murmur, and the displacement of the apex beat.

CASE OF INSOLATIO.

Shown by the President.

The case occurred in a policeman, who, in August, 1893, was on duty in the City. When first seen he was suffering from semi-consciousness, giddiness, and complained of occipital head pain. Temperature 102°. An icebag was

applied and Sulphonal given. Next morning the temperature was normal, and it did not again rise. He now exhibited marked signs of cerebral irritation with a dry skin. His expression continued anxious and he was still giddy. Some days later he had improved, but the gait was unsteady, kneejoints exaggerated, and clonus present. He next had delusions, then suddenly became quite sane. Three days later the exaggeration of the reflexes was more marked, and exhibited a long latent period. Then he was melancholic for three days, and this subsided, leaving weakness and tremor. He was sent to the country a month ago. Now tremors all over the body were very pronounced, especially on the right side, and there was great weakness of the limbs with exaggerated knee jerks and unsteady gait.

Dr. F. J. Smith commented on the case from a medico-legal aspect, and said it would be interesting to see him in a year's time.

Sir Hugh Beevor said that he should strongly recommend a careful removal from all strong stimuli, and that in the present excitable state of his nervous system any shock might again unhinge his mental balance.

Dr. Hingston Fox said that some of the symptoms pointed to a descending sclerosis as a result of some cerebral change.

The President said the case had much improved during a month's stay in the country. When he was sent away the left was as bad as the right side ; the former had now improved. It was interesting that the exaggeration of the reflexes took place after a distinct epileptiform seizure.

Sir Hugh Beevor showed a woman, F.C., aged 20 years, with a loud systolic murmur and thrill over the pulmonary area. She was a well-grown woman with but slight evidence of any ailment, slight dyspnœa, and cold hands. No cyanosis.

Dr. F. J. Smith suggested the presence of a gland pressing on the pulmonary artery.

Dr. Hadley suggested the bruit was due to the depression of the sternum, and said he had met with similar cases.

Dr. Chaplin would attribute the condition to congenital stenosis.

Sir Hugh Beevor also showed a woman, A.B., aged 40 years, with a musical systolic murmur over the aortic area, conducted up the carotid vessels. There was no hypertrophy or dilatation, and no history of acute rheumatism.

Dr. Hadley suggested the cause of this bruit was atheroma.

Dr. Chaplin would assign malformation as the reason, probably a patent foramen ovale. He mentioned the case of Lord Chancellor Campbell, who lived to eighty years with an aortic bruit, and post mortem only two cusps were found in the aortic valve ; the other was represented by a long floating tag of fibrin.

Sir Hugh Beevor thought that the musical character of the bruit pointed to something which was more free to vibrate than an ordinary vegetation.

Dr. Fred. J. Smith showed two cases of Paralysis dating from infancy. The first was a man aged 28, born with right hemiplegia (? instrumental delivery) ; he now had well marked athetosis of the right arm ; the movements frequently extended to the right leg, and occasionally to the left limbs. The other was also a man, aged 42 ; in his case left hemiplegia came on with infantile convulsions at the age of 21 months. He exhibited complete left facial paralysis, and also complete paralysis, with flaccidity and wasting of the muscles of the left upper arm and shoulder.

Dr. Smith explained that the two cases were interesting, as contrasting the results of two different lesions which occurred in infancy. Athetosis was probably the result of a superficial cortical lesion, whilst the other suggested softening of the sub-cortical motor tract, or infantile paralysis (P. M. the case proved to be one of Infantile Paralysis).

Dr. Hadley remarked that if the athetosis were due to a superficial cortical lesion he should have expected that some form of Jacksonian epilepsy would have been noticed.

Mr. Openshaw showed a case of nævus of the right half of the tongue of thirty years' duration, which had during the past five months undergone considerable enlargement. It was now somewhat smaller than it was a month ago. The tumour involved the substance of the tongue, was as large as a tangerine orange, was of a dark venous colour, and surrounded by a considerable mass of indurated tissue.

Dr. Manson suggested the diagnosis of Gumma.

Mr. Openshaw, in reply, said that there was no history of syphilis. The patient was a German Jew. He said the diagnosis was probably one of nævus with inflammatory thickening around it. The possibility of the growth being sarcomatous had been considered, and abandoned.

NOVEMBER 22nd, 1893.

INHALATION OF OXYGEN AS A MEANS OF MEDICAL TREATMENT.

Paper read by Dr. G. Newton Pitt.

The author read notes of cases in which Oxygen had been employed with varying success. In some its benefit was marked, but in several it appeared to have had no marked effect.

A case of pneumonia in a woman, aged 35, who on the fifth day with the crisis, passed into a state of unconsciousness, and was apparently moribund. Oxygen was administered continuously and stimulants given with marked results, the patient's recovery being largely due to the former. A case of broncho-pnemonia in a child was largely benefited by it, but two cases of pneumonia in elderly drunkards with a considerable amount of bronchitis died without any benefit being obvious. The life of a patient with pyopneumothorax and phthisis was certainly saved by its use. It was administered continuously, the tube being allowed to remain close to the patient's mouth, ten feet of gas being used daily. Spasmodic attacks of dyspnœa in a case of phthisis were relieved by the gas, but in two cases of persistent dyspnœa with advanced phthisis, no benefit was obtained.

A patient with attacks of palpitation and syncope, after a long illness, was very much relieved by the inhalation of oxygen. The attacks were less frequent and the appetite improved.

The author stated that in two cases of uræmic coma inhalation of oxygen had no effect, and in a case of dyspnœa with drowsiness, due to chronic uræmia, on only one or two occasions had he found it of any value.

In a case of cerebral hæmorrhage with coma it slightly diminished the asphyxial condition due to the engorgement of the lungs.

In laryngeal diphtheria with collapsed lung, or with

membrane passing down the bronchi, it was found to be useless. He drew the following general conclusions :—

(1) The inhalation of oxygen is of marvellous value in some cases of pneumonia, especially when there is much lividity and cardiac failure and at the crisis. Yet it often fails to be of any service, and it would appear that it is of more value when the main trouble is due to a crisis, or to cardiac failure and collapse, than when it is due to asphyxia produced by general bronchitis or œdema.

(2) In cases of empyema, pneumothorax, and pleuritic effusion, great relief can be afforded to the dyspnœa and cardiac failure until operative measures are undertaken.

(3) Cases of feeble patients with phthisis may be relieved, but more often there is no benefit.

(4) Cases of weakly convalescents and feeble cardiac patients will often derive benefit. Inhalations may be given periodically for weeks, but oxygen alone will not restore health ; it must be merely used as an adjuvant.

(5) Cases of chlorosis, pernicious anæmia, and leucocythæmia receive great temporary benefit, but the oxygen must be supplemented by other drugs.

(6) Conditions of asphyxia and lividity from respiratory failure, engorgement due to cerebral failure, and also coma from various causes, may be relieved.

(7) Its value in uræmia, though insisted upon by French writers, is still problematical.

(8) It may often be a valuable addition in diminishing the risks of anæsthesia.

Dr. A. T. Davies introduced Mr. Madden, the Librarian at St. Bartholomew's Hospital, who had recovered from double pneumonia.

Mr. Madden detailed the points of his own case, and emphasized the immense relief which, when suffocating, he derived from inhalations of oxygen ; in fact, he attributed his recovery entirely to the use of oxygen. He was a patient in St. Bartholomew's Hospital.

Dr. F. J. Smith thought that such a narrative and statement of absolute fact were worth any amount of theory, and undoubtedly proved that oxygen did relieve dyspnœa. He asked whether it was possible to administer too much oxygen. He had administered oxygen for half-an-hour with no benefit in a severe case of cardiac disease and in a case of severe capillary bronchitis where the tubes were blocked.

Dr. Frederick Taylor thanked Dr. Pitt for having included the cases where the administration of oxygen had failed with those in which it had succeeded. Several cases of broncho-pneumonia under his care had been quite unbenefited by oxygen. A case also of capillary bronchitis, where the patient was livid and the tubes were filled with

pus, derived no benefit from inhalations of oxygen. Dr. Taylor detailed a few cases where decided relief had been recorded. In a case of obstruction in the upper air passages, tracheotomy was necessary, and during its performance the patient became cyanosed; oxygen was given with the anæsthetic, and the patient recovered. A boy was admitted into Guy's Hospital with peritonitis, which was subsequently shown to have arisen from perforating ulcer; one grain of opium was given every two hours, and then every hour; symptoms of poisoning came on, and the respirations fell to eight in the minute; coffee was given per rectum, and oxygen was inhaled, with the result that the patient recovered from the toxic symptoms, though he afterwards died from the abdominal lesions.

In a case of double pleurisy and empyema, after tapping both sides, dyspnœa supervened, and this was relieved by the inhalation of oxygen. A typical case of Leucocythœmia underwent remarkable benefit from its administration, one cubic foot per diem for two months being given. The spleen became three inches less in surface measurement, and the white cells less in number. Dr. Taylor had never seen a similar amount of improvement in any other case of leucocythœmia. Dr. Taylor asked Dr. Pitt whether he was able to measure accurately the amount of oxygen which was being administered. Dr. Taylor would certainly be inclined to resort more often to the use of oxygen in pneumonia.

Dr. Hamilton Allen (Stanmore) had administered oxygen in two fatal cases, and had reported them because of the marked influence produced by oxygen. He had noticed benefit from oxygen in case 1, Pericarditis and pneumonia; 2, Influenza and pneumonia; 3, Double pneumonia; 4, Bronchopneumonia in a child.

Dr. Newton Pitt, in reply, said that physiology at present fails to explain the action of oxygen.

Messrs. Allen & Hanbury showed the production of Ozonised Air by electricity, and explained the apparatus, the invention of Mr. Andreoli.

DECEMBER 13th, 1893.

INTUSSUSCEPTION OF BOWEL.

Two specimens shown by Dr. Charlewood Turner.

In these two cases the symptoms had lasted three days, and the patients were admitted in collapse, and died in a few hours. In one case there was a tumour to be felt in the right iliac fossa, in the other there had been tympanites but no tumour. The first specimen showed intussusception extending to the sigmoid; there was slight congestive

peritonitis, and a convoluted sausage-like tumour in right hypochondriac and umbilical regions. The patient was a male aged six months, poorly nourished. The case was interesting as showing that the tumour of an intussusception although occupying the sigmoid flexure need not necessarily be on the left side. Death occurred on the third day.

The second specimen was one of ileo-colic intussusception, although occupying the sigmoid flexure : the end of the ileum protruded through the valve into the cæcum, producing a tumour situated in the right lumbar region. The ileum was congested and distended, and the colon contained blood. The patient was a male aged eight months, and well nourished. The child suddenly became ill on May 8th with vomiting, and the motions contained blood on the 8th, 9th, and 10th. The infant was admitted on May 10th in collapse, and died in five hours. Both infants died on the third day. Therefore in internal strangulation it was dangerous to delay operation beyond the second day.

Dr. F. J. Smith showed a liver exhibiting perihepatitis ; the liver was subdivided into many lobuli. The patient, a woman, was admitted with peritonitis, and died. The autopsy showed a gall bladder full of pus, the liver had a thick capsule and a dozen lobes.

Dr. Chaplin asked whether there was any albuminuria in this case.

Mr. John Adams enquired whether there was jaundice.

Dr. F. J. Smith replied that there was a trace of albumen, and therefore it corresponded with the statements in text books ; also that the patient was jaundiced of a greenish tint.

Dr. Arnold Chaplin exhibited a specimen of aortic stenosis and epithelioma of the œsophagus.

Dr. Hingston Fox asked whether the præsternal dulness was due to the dilated aorta, and whether the epithelioma of the œsophagus was a distinct affection.

Dr. Turner asked whether there was any probability that the growth was compressing the aorta, and so producing the dilatation.

Mr. F. J. Smith asked whether it was not probable that the œsophageal tumour was the last and quite a separate factor in the man's death, and

whether the aneurysmal dilatation of the aorta was not the primary and principal disease.

Dr. Chaplin agreed that the diseases were distinct and unfortunately coincident. There was no pressure on the aorta but there was some inflammatory tissue behind the aorta. Judging from the duration of the difficulty of swallowing he should say that the carcinoma of the œsophagus preceded the morbus cordis.

Mr. Charters Symonds showed two Appendices Cæci. One whole appendix, which, after the abscess was opened, came away entire sequestrum, and was followed by rapid healing. The other specimen was removed from a child aged seven years, who had suffered from recurrent typhlitis. The specimen was removed in the interval of the attacks with a very satisfactory result.

Dr. F. J. Smith mentioned a case of hœmatoma of the mesentery in relapsing typhlitis.

Dr. Hingston Fox alluded to the pathology of the appendix cæci, and the mystery of its function, if any. There was a strong tendency to attribute all cases of appendicitis to foreign bodies, though in many cases only inspissated fæces could be discovered. This part of the bowel was rich in adenoid tissue, and he would ask whether hypertrophy of these tissues, due to repeated catarrhs, had not often a large share in causing the acute attacks.

Dr. F. J. Smith showed bacilli lepræ, stained with fuchsine. He pointed out that so far as appearance was concerned they exactly resembled tubercular bacilli, the only difference was that they stained differently.

Dr. F. J. Smith showed a gall stone impacted in the cystic duct, with an enlarged gall bladder.

Dr. F. J. Smith showed ruptured liver, kidneys, and diaphragm from a patient who was run over by a dray. There was not the least bruising of the skin though there was a fracture dislocation between the 1st and 2nd lumbar vertebræ.

Dr. F. J. Smith showed an enormous liver taken from a man who suffered from paralysis of the face and left shoulder, with carcinoma of the pancreas and secondary deposits in the liver. Dr. Hughlings Jackson's opinion was that the paralysis was a rare form of infantile paralysis.

Mr. A. H. Tubby showed the upper epiphysis of the Humerus removed by operation from the shoulder joint of a child with abscess, rigors, and other signs of acute epiphysitis. The head of the bone lay loose in the abscess cavity. The child subsequently died of pyæmia.

In reply to the President, there was a doubtful history of injury.

In reply to Dr. Hadley, there was no history of congenital syphilis.

CEREBRAL ARTERIES FROM A CASE OF SUBDURAL HÆMORRHAGE.

Specimen shown by Dr. Hingston Fox.

The specimen was taken from the body of a gentleman, a newspaper writer, aged 58 years, who was seen in consultation with Dr. Vaughan Barber, of Finsbury Park. He was then in a partially comatose condition, which had come on gradually during three days ; he could be roused by speaking loudly, and replied to questions by shaking his head. There was no paralysis of the limbs, but movements were infrequent and sluggish, especially on the right side ; knee jerks present, right ankle-joint held rigidly ; urine passed under him. The pupils were unequal, the right much contracted. Signs of sclerotic degeneration were present in the arteries and heart, and albuminuria existed. He died three days later.

At the autopsy fluid blood was found in the subdural space, flowing out immediately on opening the cranium. A large layer of deep red clot, adherent to the under surface of the dura mater, was situated over the middle third of the convex surface of the cerebrum on the left side, and a similar clot was found in the middle fossa at the base. The principal arteries at the base of the brain exhibited numerous patches of atheroma. The petrous bones appeared to be normal although the patient had had a puriform discharge from the left ear for many years.

Mr. Openshaw mentioned a somewhat similar case of hæmorrhage beneath the dura-mater where there was left hemiplegia and dilatation of the pupil on the right side.

JANUARY 10th, 1894.

SPORADIC CRETINISM.

Paper read by Dr. Fletcher Beach.

After giving a short history of the subject, the author stated that the observations in the paper were chiefly founded on an analysis of 116 cases, collected from various sources, including 16 which had been under his own care. He mentioned that the disease was present in the fœtus and that the cases formerly defined as fœtal rickets were now known to be cases of sporadic cretinism. He described the condition of the body, thyroid gland, fatty tumours, skull and bones found in such cases, and alluded to the state of the brain in one of Dr. Barlow's cases, which showed remarkable features in the temporo-sphenoidal lobes. Sporadic cretinism was also found in calves, sheep, and dogs. The etiology of the disease was then considered, and the influence of consanguinity, intemperance, phthisis, inherited mental disease, neurotic inheritance, and fright of the mother during pregnancy in the production of the disease was described. It was shown that the lowest age at which patients had been treated was six months and the highest 42 years ; on the other hand the symptoms were first noted in fifteen cases at or soon after birth, and from that time up to the age of eighteen months, twenty-five were seen. With regard to the sex, so far as the analysis of 116 cases went, in sporadic cretinism there were not quite twice as many females as males, a different proportion to that found in myxœdema, in which females were four times as many as males. With respect to the locality in which these 116 cases occurred, it appeared that the disease prevailed most extensively in England, and that Scotland, France, and America had about an equal number. The author related the symptoms found in sporadic cretinism, and stated that previously to the report of the Clinical Society on myxœdema, he held the opinion that sporadic cretinism and myxœdema were one and the same disease, any differences between the two being due to the different ages at which the two diseases

were developed. Sporadic cretinism was due to absence or disease of the thyroid gland, for in some few cases bronchocele had been found to be present. The opinion of Horsley that the thyroid gland had a hæmopoietic, as well as a secreting, action was alluded to, and the differences between the changes which took place in the thyroid gland in myxœdema and in sporadic cretinism were mentioned. It was shown that the same fibrous changes which occurred in the tissues of the monkeys operated upon, and kept alive by Horsley, were present not only in myxœdema and cachexia strumipriva, but also in sporadic cretinism, and a case under the care of the author, in which these changes were seen, was described. The diagnosis and prognosis of sporadic cretinism were touched upon, and the treatment was shortly mentioned.

Dr. Wallis Ord mentioned two cases which had come under his care in which five grains of the dried extract of thyroid gland had been given daily with steady improvement.

Dr. Shuttleworth showed photographs of several cases both before and after treatment with thyroid extract. He had met with five cases and had treated them with tonics till last year, but without any material benefit. They were four females and one male. In two families the eldest and fourth child were affected, the second and third being normal.

Dr. Fletcher Beach, in reply, stated that in his experience most cases occurred in the lower classes, that the number of first born children affected was not great, and in a much larger number of cases the children affected were the second, third, or fourth. In many cases some healthy children intervened between two cretins in one family. The pulse in these patients was small and quick, they were very subject to bronchitis, were very apathetic, and many when placed in a chair would remain all day without moving.

AMPUTATION FOR MAMMARY CARCINOMA.

Paper by Mr. Openshaw.

Mr. Openshaw brought forward the notes of twenty-two consecutive cases of amputation of the breast for carcinoma, all of which, without exception, had entirely healed by first intention. He was indebted to Mr. Waren Tay, his

colleague at the London Hospital, for the opportunity of operating upon most of the cases, and for permission to make use of the notes.

The consecutive temperature charts were exhibited and in every case the temperature was normal on the fourth day, and in no case was there ever a higher temperature than 101 degrees. Mr. Openshaw wished particularly to emphasize not only the fact that the charts were those of consecutive operations, but that the cases had not been selected with a view to a good record, but every case seen had been operated upon wherever such operation was justifiable. That the cases were severe is attested by the fact that in 17 out of the 22 cases the axilla was opened and one or more secondary glands removed therefrom. The cases are those of amputation for scirrhus, the tumour in every case being verified histologically after operation. The patients presented more or less the usual signs and symptoms of the disease. Their ages ranged from 37 to 68 years and the duration of the disease, from the time when first noticed till the date of operation, from six weeks to two years.

Mr. Openshaw considered that the good results were attained solely by attention to minutiæ and more particularly the following. The day preceding that of operation the patient's axilla should be shaved, the skin over the breast and axilla should next be well cleaned and covered with a carbolic lint compress. The next day the patient having been anæsthetised this compress should be removed and the skin of the part should then be forcibly sponged with 1 in 20 carbolic lotion. The area of operation only should be exposed the rest of the body being warmly wrapped up. The instruments should be clean and sharp and should rest in, be removed from, and returned to, a lotion of carbolic acid (1 in 40). The operation should be performed quickly without dawdling, but every piece of breast should be removed. The growth must be removed entirely by cutting, on no account must it be torn away, even partially by the fingers. Such traction produces a laceration. Every bleeding vessel should be secured by ligature and not caused to contract by ice or

hot water. Ligature prevents subsequent oozing from the vessels when the patient is warm in bed and recovers from shock. Such hæmorrhagic extravasations may suppurate even so late as the second week, though the skin wound has completely healed.

During the operation all clots should be gently removed by dabbing with a soft sponge wet with warm (1 in 40) carbolic lotion. Any fluid used for the wound should be the same temperature as the blood. The use of very hot or cold or iced water or other styptic, the use of strong antiseptic fluids or of the spray is bad. Their use causes a more or less degree of injury to the superficial layers of the cut surfaces.

If possible a drainage tube should be dispensed with, and if these details are attended to one is seldom necessary, even though the axilla has been thoroughly cleaned out. The sutures should be of silkworm-gut. The wound should be covered consecutively with lodoform, a new absolutely clean sponge, fresh carbolic gauze, and absorbent cotton wool. Lastly, the arm of the same side should be laid upon the wool of the dressing and firmly bandaged to the chest, the hand resting upon or near the opposite shoulder. The arm thus bandaged to the side acts as a splint to the wound. By it firm pressure is applied, extravasation prevented, and the parts are kept thoroughly at rest till the wound is healed.

The dressing should not as a rule be disturbed till the eighth day. If a drainage tube has been inserted it should be removed in twenty-four to thirty-six hours, after that time it acts as a foreign body. The sutures should be removed on the eighth day, and the arm should again be bandaged loosely to the side in order to support the wound till the tenth or twelfth day.

Mr. Openshaw said he had been induced to place these results on record because of the inability expressed by an eminent surgeon to decide whether or not we ought to advise operation in cases of carcinoma of the breast. He himself thought it wrong not to urge a patient to submit to operation if the skin was intact, even when secondary glands

occupied the axilla. He believed that operation, as a rule, prolonged life. In those cases where life was not prolonged the patients were enabled to hope that the disease had been cured, and in the majority of cases the pain was considerably relieved and a foul discharge got rid of or prevented.

So far as he could ascertain from cases which had come under his notice, the average duration of life when the disease ran its course was not more than two years. Of the twenty-two cases of operation recorded above four were apparently cured, and had no recurrence two years after operation. In five slight recurrences had taken place and had been removed. In two cases the recurrences were past operation when the patients next presented themselves, and three patients were certainly dead of recurrences. Mr. Openshaw considered there were two reasons why the patients do not live longer after operation. (1) They are lost sight of and fail to recognise recurrence until too extensive for removal; and (2) they fear an operation, and neglect to present themselves for a second. He considers that this fear can only be diminished by so performing the operation as to ensure rapid healing by first intention. Patients who have not undergone the terrors and exhaustion of prolonged suppuration or erysipelas will be much more eager to submit to the removal of enlarged glands, and the results of operation as regards subsequent length of life will improve as a natural consequence. Mr. Openshaw pointed out that the death rate of these operations at the London Hospital had fallen from 6 per cent. for the years 1880-84 to 2·5 per cent. for the years 1885-93. In 1892-93, seventy-four amputations had been performed without death. He considered that the dangers of the operation had been reduced to such a minimum that he unhesitatingly advised the removal of any mammary tumour where any doubt existed as to the existence of carcinoma. He considered that the mental relief experienced by the patients was itself sufficient to justify operation in all but hopeless cases.

JANUARY 24th, 1894.

THE PRESIDENT showed a policeman with a systolic aortic bruit of one year's duration, and an aneurysm of the dorsalis pedis artery, which had been cured recently by a ligature of the anterior tibial just above the ankle joint. The case was of interest because, some two years before the aneurysm developed, the patient, who was deaf, was crossing the street, and had this left foot trodden upon and much injured by a horse's hoof, and it was at the site of the injury that the aneurysm subsequently developed.

DR. COTMAN showed a woman aged 54, with well marked carcinoma of the left breast, with secondary axillary infiltration. There was a history of a blow four years before, and a mass in the breast had been noticed for two and a half years.

GRAVES' DISEASE IN CHILDHOOD.

Case shown by Dr. Hingston Fox.

William N., a boy aged 12 years, had been brought to St. Luke's Mission Dispensary occasionally since infancy, suffering from minor ailments—eczema, enlarged glands, bronchial catarrh, scarlatina, etc. Six years ago nervous twitches and over-acting heart were noted as present. He was one of three children, one being still-born, and the third died of convulsions. He had been attending for sixteen months past : at first only impaired nutrition with dyspepsia were observed ; tremor of hands had now been noticed for twelve months, proptosis for eight months, with irritable knee-jerks. Diarrhœa became troublesome in the summer, and proved obstinate, especially from 4 to 7 a.m. daily, being at length controlled by enemata of tannic acid, and opium internally. Rapidity of heart's action had only come on this winter, the pulse rate rising to 115, seldom down to 90. He had been treated for six weeks past with a mixture of potassium iodide and bromide, with iron and belladonna—of the latter $1\frac{1}{2}$ minims of the liquid extract (equivalent to

m. xxi. of the tincture) three times a day, besides cod liver oil. The diarrhœa had ceased, and he was altogether better, so that beyond the proptosis and slight tremors there were no very apparent morbid signs. No thyroid enlargement could be made out, but the other three cardinal symptoms of the disease were present; it was unusual to see it at so early an age. The case had proved more tractable by drug treatment than it commonly was in adults; this was to be expected.

ANEURYSM OF THE INNOMINATE ARTERY.

Case shown by Dr. Bertrand Dawson.

A female patient, Mrs. B., aged 56, presented a pulsating swelling just above the right sterno-clavicular joint, which had been noticed for five years. She attributed the swelling to having lifted her husband five years ago. The swelling was now the size of an egg, and behind the sternomastoid muscle. The size of the tumour was said to vary slightly from time to time. The heart sounds were abnormal, a diastolic bruit being heard at the apex, which was below the nipple, and a double bruit at the right of the sternum. Her symptoms were occasional pain in shoulder, precordial pain and inability to sleep. She complained also of dyspnœa and palpitation on exertion, but was otherwise in very fair health. Dr. Dawson said that although the tumour had existed for five years it was probably aneurysmal and involved the innominate; that he had found several cases in the London Hospital where the tumour had been of several years' duration.

Mr. Openshaw said that although the tumour was now stationary and the patient in fair health, yet he thought the time would come when the tumour would enlarge, and when ligature would be compulsory, and not so effective as at the present time. He would, therefore, advise ligature of the common carotid now.

BRONCHIECTASIS TREATED BY CREASOTE INHALATIONS.

Case shown by Dr. Arnold Chaplin.

The patient, a girl aged 16, gave the following history:— When a child she had whooping cough, and since then a

paroxysmal cough coming on in the morning on waking, and often culminating in vomiting. This cough had been attended for the last three years with profuse, horribly foul, expectoration, which came in gushes and filled the spittoon, and made her a trouble to herself and to those with whom she associated. In addition to this she had severe dyspnœa on exertion, had lost flesh, and was troubled with night sweats.

On examining the chest there was some slight fulness at the right base, especially behind. The percussion note was impaired almost to dulness below the inferior angle of the scapula. Just below and external to the angle the note was tubular ; this impairment passed round to the front below the nipple. On auscultation there were to be heard creakings, crepitations, coarse and bubbling râles, attended with weak bronchial breath sound, and bronchophony, which became intensified after coughing.

The patient had been in the City of London Hospital for Diseases of the Chest, under the care of Dr. Thorowgood, where various remedies were tried with a view to diminishing the fœtor of the expectoration, but without success. She was again admitted towards the end of last year, and, by the courtesy of Dr. Thorowgood, was treated by Dr. Chaplin in a different way. The method of treatment was as follows :—Some coal tar creasote was obtained, and a small chamber fitted up and made as air-tight as possible. Some of this creasote was placed in a dish and heated by a spirit lamp, until the fumes were given off in great quantity. The patient was then placed in the chamber and inhaled the fumes with which the chamber was filled, for one hour every day. This inhalation produced violent coughing, with the expulsion of much expectoration. After three inhalations the morning paroxysm of coughing was absent, and the expectoration became sweet. The treatment was then discontinued for two days, and the old state of things returned, soon to be removed however on the resumption of the treatment.

The patient had had 54 inhalations lasting one hour each,

with the result that the expectoration was much less, and had remained free from odour for a month without any creasote inhalation whatever. This had never happened before for the last three years. The patient stated that the breathlessness and cough were but trifling now, and that the night sweating had ceased. It was submitted that this method, in this case at least, had done what other forms of treatment were proved to be incapable of accomplishing, viz., freed the expectoration from that most distressing of all symptoms in bronchiectasis,—fœtor.

A case of Transposition of Viscera in a boy aged 15 years, who was in good health, was shown by DR. F. J. SMITH.

DR. TURNER showed a girl aged 12, who presented multiple exostoses of ribs, clavicles, humeri and tibiæ.

MR. OPENSHAW asked Dr. Turner whether there was any heredity in this case, and said he had seen one case of multiple exostosis where the heredity was strongly marked. He mentioned also a case of exostosis of the sternal end of the clavicle, which had been mistaken for an upward dislocation.

CLINICAL PULSE MANOMETER.

Exhibited by Dr. Rayner D. Batten.

This instrument had been recently invented by Dr. Batten for the estimation of pulse tension. Three fingers are used, one pressing upon a spring button, resting upon the artery, to which is attached a lever and dial, so that the amount of pressure used is read off on the dial, and the other finger resting on the distal artery tells when the pulse is obliterated, while the third compresses the distal portion of the artery in order to prevent the recurrent pulse. It is better to use the fingers of both hands :—The right first finger to apply pressure to the manometer, the left first to compress the artery, and the left second to feel the pulsation.

The instrument is made by Messrs. Down Bros., St. Thomas's Street, S.E.

Dr. Glover Lyon congratulated Dr. Batten upon a useful invention. He thought that although the causes determining the force required to obliterate the pulse might be complex, it was advantageous to be able to register this force in numbers.

Mr. Openshaw and Dr. Hingston Fox both thought that the instrument merely registered the force of the heart beat, and not the vascular tension.

THE ANNUAL GENERAL MEETING.

February 14th, 1894.

Dr. Thorp and Dr. Arthur Davies were appointed as Scrutineers of the Ballot.

The Report of the Council for the past year was read by the Senior Honorary Secretary, Dr. Hingston Fox, and confirmed.

The Report of the Auditors was read by the President, and that of the Library Committee by Dr. A. T. Davies. It was resolved that all these Reports should be printed and circulated in the usual way, Dr. Tatham moving and Dr. Thorp seconding the resolution.

A hearty vote of thanks to the President for his valuable services during the past year was proposed by Dr. Cotman and seconded by Dr. F. C. Turner. This was carried by acclamation and briefly acknowledged by the President.

A ballot was then taken for the appointment of the Officers of the Society for the ensuing year. (See page 5.)

A vote of thanks to the Vice-President, Treasurer, and Librarian was proposed by Mr. R. G. Tatham, and seconded by Dr. Pitt, for their services during the past year. This was carried unanimously.

Dr. Dundas Grant moved, and Dr. Davies seconded, a vote of thanks to the Council, Honorary Secretaries, and Auditors. This was also carried.

The Fellows then adjourned to the Theatre to hear the Annual Oration, which was delivered by Dr. Dundas Grant, who took for his theme, "Reflections on the lives of John Hunter and Andrew Clark." The Oration was listened to with great pleasure and attention by about forty Fellows and visitors.

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